

102939

MT/WY Coal Gulch CWA FOIA appeal
MT/WY FOIA appeal RIN:08-00097-07

DELETED

Release in full

Region 8



13620

HISTORY

HUBER NO. 1

MURPHY OIL USA, INC.

WELL HISTORY

HUBER NO. 1

HUBER NO. 1

SUMMARY OF WELL HISTORY

WELL NAME & NUMBER:	Huber No. 1
LOCATION:	SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10, T28N, R51E
WORKING INTEREST:	100.0000%
REVENUE INTEREST:	82.75000%
ELEVATION:	2100'
DRILLING CONTRACTOR:	M.R. Wagner Drilling
SPUDDED:	February 29, 1952
DRILLING RIG RELEASED:	May 5, 1952
TOTAL DEPTH:	5776' Drilling TD 5753'
CASING:	1018' - 10-3/4" 40.5#, R-40 5753' - 7" 23#, 8rd.,
TUBING:	5640' - 2-7/8" 8rd., E.U.E.
PERFORATIONS:	5 jets per ft. 5500'-20', 5608'-1 5626'-38'
PBTD	5650' Model K Baker Cmt Retainer
INITIAL ACID:	Acidized with 500 gal. 5608'-17' 5626'-38'



MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

THOMAS L. JUDGE, GOVERNOR
GARY WICKS, DIRECTOR

BOARD OF OIL AND GAS CONSERVATION

BOARD MEMBERS

RICHARD A. CAMPBELL, CHAIRMAN
CARL J. IVERSON, VICE-CHAIRMAN
MILTON G. ANDERSON
PAUL C. BUNN
JOHN P. MOORE

15 Poly Drive
Billings, Montana 59101
August 6, 1975

RECEIVED AUG 11 1975

Mr. Dick Higgins
Polumbus Corporation
Suite 200 Three Park Central
1515 Arapahoe Road
Denver, Colorado 80202

Dear Sir:

Mr. Buster Zimmerman phoned the third of August and informed me of a hazard around the Huber tank battery located on land which he farms. The location of the battery is the NW $\frac{1}{2}$ of Sec. 10, Twp. 28N., Rge. 51E., Roosevelt County, Montana.

I inspected the lease and found that there is oil on the ground in several places. I also found water in other pits that needs to be pumped out.

To correct this situation I am requesting that you erect a firewall around the tank battery to prevent any further damage to the surrounding farm land (Regulation No. 211). The dike must have the capacity of 1 $\frac{1}{2}$ times the tank battery storage which is 1600 barrels.

It is requested that the oil spills be cleaned up and that any water in pits be removed.

I am giving you until the 25th of August, 1975 to have the work completed or a shut-in order will be issued.

We have no jurisdiction to award Mr. Zimmerman damages. In order to promote a good relationship between oil producers and landowners, I suggest you contact Mr. Zimmerman and establish good working relations with him once again.

Yours truly

Joe Simonson
Field Inspector

cc: Buster Zimmerman
Don Chisholm

DIVISION OFFICE
323 FULLER AVE.
P. O. BOX 217
HELENA, MONTANA 59601
(406) 449-2611

TECHNICAL
AND SOUTHERN FIELD OFFICE
15 POLY DRIVE
BILLINGS, MONTANA 59101
(406) 252-5109

NORTHERN FIELD OFFICE
218 MAIN STREET
P. O. BOX 690
SHELBY, MONTANA 59474
(406) 434-2422

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

NOTICE!
THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	X	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

December 17, 1968

Following is a { notice of intention to do work } on land { owned } described as follows:
~~report of work done~~ leased

LEASE Huber

MONTANA Roosevelt East Poplar
(State) (County) (Field)

Well No. 1 10 28N 51E
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from { N } line and 660 ft. from { E } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2100

READ CAREFULLY

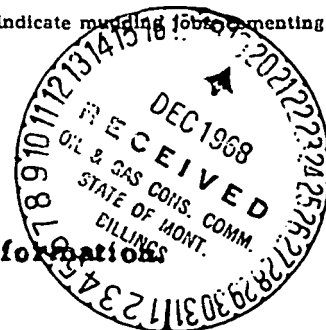
DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudlogging, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

- (1) Pull tubing, rods, pump.
- (2) Run cement bond log.
- (3) Set Baker Model C packer at 4950⁺, or just below the Heath formation.
- (4) Perforate Heath formation 4872-77.
- (5) Run tubing rods and pump.



NOTE: The presently producing Charles Zone is being temporarily shut in while obtaining the test of the Heath Zone. Plans as to future production from both zones will be contingent upon productivity of the Heath.

Approved subject to conditions on reverse of form

Date DEC 20 1968

By ORIGINAL COPY SIGNED

By Gordon D. Lanouette Title

District Office Agent

Company E. A. Columbus, Jr.

By

Title

Address 220 C. A. Johnson Bldg.
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

(SUBMIT IN QUADRUPPLICATE)

TO

MAY 12 1969

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 5, 1969

Following is a ~~notice of intention to do work~~ report of work done on land ~~owned~~ leased described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 1 SE NE 10 28N 51E
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from N line and 660 ft. from E line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2100

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE ATTACHED



Approved subject to conditions on reverse of form

Date MAY 9 - 1969

ORIGINAL SIGNED BY:

By J. R. Hug, Supervisor
District Office Agent

Title

Company E. A. Polumbus, Jr.

By J. J. Law

Title Vice-president Exploitation

Address 220 C.A. Johnson Building

Denver, Colorado 80202

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

REPORTER PRTG. & SUPPLY CO.

COMMISSION USE ONLY
API WELL NUMBER

2	5								
STATE	COUNTY	WELL							

GENERAL RULES

201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

NOTICE!

THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
Notice of Intention to Dual Complete	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 13,

1969

Following is a { notice of intention to do work } on land { owned } described as follows:
~~report of work done~~ leasedLEASE HuberMONTANA Roosevelt

(State)

(County)

East Poplar

(Field)

Well No. 1 SE NE Section 10 T. 28 N. - R. 51 W. 6th P. M.

(m. sec.)

(Township)

(Range)

(Meridian)

The well is located 1980 ft. from { N } line and 660 ft. from { E } line of Sec 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2100'

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

1. Pull rods, pump and tubing.
2. Cleanout sand from above retrievable bridge plug at 4917' and pull plug.
3. Run production packer with stinger and seal assembly to set in Model D at 5600'. Set production packer at 5480'. (This is to isolate the Charles "A" zone perms at 5500-5520')
4. Run Baker cup-type packer on 2-1/2" tubing, with cross-over assembly.
5. Run pumps and rods. Produce Charles "B" zone (5608-17 and 5626-38') through annulus and Heath zone (4864-82') through tubing.

Approved subject to conditions on reverse of form

Date NOV 21 1969

ORIGINAL SIGNED BY:

By J. R. Hug, Supervisor

Title

District Office Agent

Company The Columbus CorporationBy D. J. LowTitle Vice President - ExploitationAddress 220 C. A. Johnson Building
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

NOTICE

THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing - Heath Sand	x

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

December 15, 1969

Following is a ~~notice of intention to do work~~ { notice of intention to do work } on land { owned } described as follows:
report of work done { leased }

LEASE Huber

MONTANA Roosevelt East Poplar
(State) (County) (Field)Well No. 1 SE NE Section 10 T28N R51W 6th P. M.
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from N line and 660 ft. from E line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2100' K. B.

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Pulled rods, tubing and anchor. Ran RTTS Packer and set at 4817'

Pressured annulus to 700 psi, pumped in 4000 gallons base pad; 4000 gallons My-T-Frac pad; 2500 gallons My-T-Frac with 1# per gallon 10-20 sand; 2500 gallons My-T-Frac with 1# per gallon 8-12 sand; 2500 gallons My-T-Frac with 3# per gallon 8-12 sand; 3500 gallons My-T-Frac with 4# per gallon 8-12 sand. Flushed with 2800 gallons. Breakdown pressure 2800 psi, maximum pressure 4400 psi, average pressure 3900 psi. Total Fracture Gallons 11,000 - Total Sand 26500# (Nov. 23, 1969).

Production before treatment - 27 barrels of oil and 105 barrels of water per day.

Production after treatment - 66 barrels of oil and 277 barrels of water per day.

Approved subject to conditions on reverse of form

Company THE COLUMBUS CORPORATION

Date DEC 19 1969
ORIGINAL SIGNED BY:

By J. J. Law

By L. B. Hug, Supervisor

Title Vice President - Exploitation

District Office Agent

Address 220 C. A. Johnson Building
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

MCKEE PRINT.

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
" " " to Dual Pump Well	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

July 22, 1971

Following is a } notice of intention to do work } on land } owned } described as follows:
report of work done

LEASE.....Huber

MONTANA (State)		Roosevelt (County)		East Poplar (Field)	
Well No.	1	SE NE Section 10 (m. sec.)	T28N (Township)	R51E (Range)	M. P. M. (Meridian)

The well is located 1980 ft. from { N S } line and 660 ft. from { E W } line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2100' KB

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK

RESULT

It is our intention to produce both the Charles and Heath zones in this well by setting a packer between the zones, running two strings of tubing and setting two pumping units. The work is to be accomplished in the following manner.

Details Attached

Approved subject to conditions on reverse of form

Date..... JUL 26 1977

JUL 26 1971

ORIGINAL SIGNED BY

By Judson D. Sweet, Petroleum Engineer
District Office Agent Title

Company ~~The~~ Polumbus Corporation

By A. H. Law

Title Vice President

Address.....1000 Capitol Life Center
Denver, Colorado 80203

COMMISSION USE ONLY

API WELL NUMBER

2 5

STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

3 REPORTER PLYG. & SUPPLY CO.

WORKOVER
E. A. COLUMBUS, JR. - HUBER NO. 1 WELL
EAST POPLAR FIELD
ROOSEVELT COUNTY, MONTANA

3/3/69 Pulled rods and tubing, ran cement bond and correlation log. Set retrievable bridge plug at 4980' and perforated Heath 4870-74 with one shot per foot.

3/4/69 Ran packer on tubing and set at 4780'.

3/5/69 to 3/7/69 Swabbing water with a trace of oil.

3/7/69 to 3/8/69 Prepared to squeeze perforations - Halliburton truck broke down. Bad weather prevented work until 3/9/69.

3/9/69 Squeezed perforations with 100 sacks DOC. SI overnight.

3/10/69 Released packer, circulated cement out of hole. Well filled with water with trace of oil and overflowed at indeterminate rate.

3/13/69 to 3/25/69 Put well on pump and tested to tanks. Produced about 15 barrels water per hour with slight trace of oil.

3/25/69 to 3/31/69 Moved in rig. Ascertained bridge plug was leaking. Ran new bridge plug to hold. Swabbed well down.

3/31/69 Perforated Heath from 4864-82 with 20 holes. Swabbed well dry.

4/1/69 Acidized with 500 gallons followed with 200 barrels treated lease oil - displaced oil at 2½ barrels per minute at 2550psi.

4/2/69 After swab testing, put well on pump.

4/3/69 to 4/27/69 Testing on pump. Averaged approximately 30 BOPD and 8 BWPD.

4/28/69 to 5/2/69 Moved tools back on well, pulled rods and tubing and released bridge plug. Well again filled with water. Ran retrievable bridge plug and packer. After numerous settings, determined that water is coming from below 5468 feet, or from the Charles "A" zone.

5/3/69 Set new bridge plug 4917, packer at 4816, fraced Heath with 15000 gallons salt water and 9500# sand. Broke formation with 4300 psi, pumped in water and sand at 12.5 barrels per minute at average pressure of 3400 psi. Immediate SI pressure 2050 psi, 5 min pressure 1800 psi, 10 min pressure 1700 psi. Let set overnight.

5/4/69 Pulled packer and reran tubing. Ran rods and placed on pump. Started pumping at 6:00 p.m.

5/5/69 to 5/6/69 While recovering load water, pumped oil at rate of 230-260 barrels per day. Currently about 25% water with an estimated 100 barrels of load water to be recovered.

NOTE: The bridge plug has been left in the hole pending a decision as to future plans to produce the Charles.

Huber No. 1
July 22, 1971
Page 2

1. Pull retrievable bridge plug at 4917' which now isolates the Charles from the Heath.
2. Set Baker Model "D" packer at approximately 5480'.
3. Run 2 7/8" streamline tubing with stinger and seal assembly to set in present Model "D" at 5600' (These two Model "D" packers will isolate the Charles "A" zone perfs at 5500-5520'). Latch into upper Model "D".
4. Run 2 3/8" streamline tubing to approximately 5000' and latch into parallel string anchor.
5. Run pumps and rods. Produce Charles "B" zone (5608-17 and 5626-38') through 2 7/8" tubing and Heath zone (4864-82') through 2 3/8 " tubing.
6. Set second pumping unit and put on production.

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

SUNDRY NOTICES AND REPORT OF WELLS

NOTICE

THIS FORM BECOMES A
PERMIT WHEN STAMPED
APPROVED BY AN AGENT
OF THE COMMISSION.

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
		Subseq. Rept. of Dual Completion	X

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

December 7, 1971

Following is a ~~notice of intention to do work~~ { on land } owned { described as follows:
report of work done } leased

LEASE Huber

MONTANA
(State)

Roosevelt
(County)

E. Poplar
(Field)

Well No. 1 SE NE Sec. 10 28N 51E M.P.M.
(m. sec.) (Township) (Range) (Meridian)

The well is located 1980 ft. from N line and 660 ft. from E line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2100 KB

READ CAREFULLY

DETAILS OF PLAN OF WORK

READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

See Attached

Approved subject to conditions on reverse of form

DEC 10 1971

Date ORIGINAL SIGNED BY

By Judson D. Sweet, Petroleum Engineer
District Office Agent Title

Company THE COLUMBUS CORPORATION

By J. J. Law

Title Vice President

Address 1000 Capitol Life Center
Denver, Colorado 80203

COMMISSION USE ONLY
API WELL NUMBER

2	5								
STATE	COUNTY	WELL							

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

3 REPORTER PRG. & SUPPLY CO.

DETAILS OF WORK
RESULT

During period 9/25/71 to 10/13/71, the following work was performed to recomplete this well as a dual producer from the Heath and Charles.

1. Pulled bridge plug at 4917' which isolated the Heath and Charles.
2. Drilled out old Model D at 5600' and set new Model D at 5585' (Could not get through old Model D).
3. Set second Model D at 5459' to isolate Charles A perfs. @ 5500-5520 between these packers.
4. Ran 2 7/8" streamline tubing w/seal assemblies for these Model D packers and latched into upper Model D.
5. Swabbed Charles dry, noted no fillup. Pumped 250 gal 15% HCl acid into Charles to cleanup.
6. Swabbed at rate of 10 Bbl/Hr 10-20% oil.
7. Ran 2 3/8" streamline tubing, latched into parallel anchor at 4947:
8. Ran rods and pumps in two strings of tubing.
9. Set second pumping unit.
10. Charles on production 10-14-71, Heath on production 10-26-71. Charles producing 35 BO + 320 BWPD from B-1 & B-2 perfs 5608-17 and 5626-38.
Heath producing 15 BO + 240 BWPD from perfs 4864-82.

Submit In Quadruplicate To:
Montana Board of Oil and Gas Conservation
1520 East Sixth Avenue
Helena, Montana 59620-2301

ARM 36.22.307
ARM 36.22.605
ARM 36.22.1308

Notice of Intent to Change Operator

The undersigned Transferor hereby notifies the Board of Oil and Gas Conservation of
its intention to transfer ownership and/or operation of the following wells to the undersigned Transferee:

Lease Name:
Huber

Lease type: (Private, State, Federal, Indian)
Private

County:
Roosevelt

Field name:
East Poplar

Description of wells: (Include official well name and number as reflected on Board of Oil & Gas Conservation records, API well number, and exact location of the well including quarter-quarter section, footage measurements, Section, Township, and Range.)

Huber No. 1, Huber No. 2, Huber No. 3, Huber No. 4-A, and Huber No. 5-D
See attached sheet for information
Effective _____ change of owner/operator from Murphy Exploration
and Production Company to _____

Transferor's Statement:

I hereby designate the Transferee named herein as the owner and/or operator of record of the above described well(s). I acknowledge that the Transferor continues to be responsible for said well(s) and all associated equipment and facilities until such time as this transfer is approved by of the Montana Board of Oil and Gas Conservation. I certify that the information contained herein is true and correct:

Company Murphy EXPRO
Street Address 131 South Robertson Street
P.O. Box Box 61780
City, State, ZIP New Orleans, LA 70161-9969
Signed _____
Print Name Sidney W. Campbell
Title Manager Onshore Operations
Telephone (504) 561-2594

Transferee's Statement:

I hereby accept the designation of operator/owner for the above described well(s). I understand that this transfer will not be approved until the Transferee has complied with the Board's bonding requirements. I acknowledge that under Section 82-11-101 MCA, the Transferee herein is responsible for the costs of proper plugging and restoration of the surface of the well(s) described above. I certify that the information contained herein is true and correct:

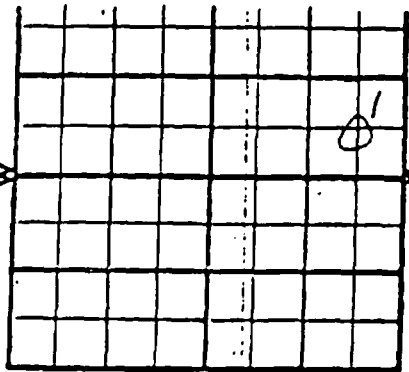
Company _____
Street Address _____
P.O. Box _____
City, State, ZIP _____
Signed _____
Print Name _____
Title _____
Telephone () _____

BOARD USE ONLY

Approved _____
Date _____
Name _____ Title _____
Oper. No. _____ Bond No. _____

Field Office Review	Date	Initial
Inspection	_____	_____
Records Review	_____	_____
Operations	_____	_____
Oper. No.	Bond No.	





BOARD OF RAILROAD COMMISSIONERS OF THE STATE OF MONTANA

Paul T. Smith, Chairman

Austin B. Middleton, Commissioner

Leonard C. Young, Commissioner

OIL AND GAS WELL DIVISION

LOG OF OIL OR GAS WELL

Company C. C. Thomas Address Denver, Colorado
Lessor or Tract Huber Field East Poplar State MONTANA
Well No. 1 Sec. 10 T. 28N R. 51E Meridian County Roosevelt
Location 1980 ft. { S } of North Line and 660 ft. { W } East Line of Sec. 10 Elevation 2100 RB
(Derrick floor relative to sea level)
The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Date May 29, 1952

Signed s/ ROBERT D. SNYDER

Title Petroleum Engineer

Address Billings, Montana

The summary on this page is for the condition of the well at above date.

Commenced drilling February 29, 1952 Finished drilling May 5, 1952

Oil or Gas Sands or Zones
(Denote gas by G)

Important Water Sands

No. 1, from 5500 to 5520
No. 2, from 5608 to 5617
No. 3, from 5626 to 5638
No. 4, from to
No. 5, from to

CASING RECORD

Size Casing	Weight per Foot	Threads Per Inch	Make	Amount	Kind of Shoe	Cut & Pulled From	Perforated From To	Purpose
7"	23	8 rd	Youngston	-	5 jets per foot	5500	5520	
					5 jets per foot	5608	5617	
					5 jets per foot	5626	5638	
(Model K Baker Cement Retainer Bridge Plug at 5650)								
(Model D Baker Production Packer at 5600, Well flowing thru 2 7/8 OD Tubing)								
*Perforated with 6 shots per foot with bullets 5608-13 and 5626-31								

CP41J52

2893

11PPE7

Offel

CASING OR TOOLS LOST OR SIDETRACKED

From 11PPE7 Description

From 11PPE7 Description

From 11PPE7 Description

11PPE7

MUDDING AND CEMENTING RECORD

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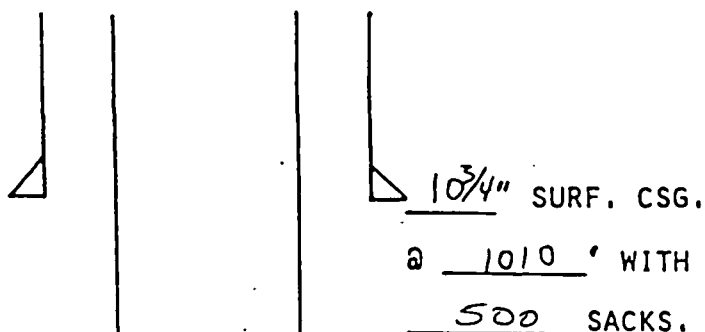
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[illegible]

LEASE Huber
LOCATION SE NE Sec. 10-28N-51E
COUNTY Roosevelt

WELL NO. 1
FIELD East Poplar
STATE Montana
TD 5776' KB 2104'
DF _____ GL _____



COMPLETION INTERVALS:

Top of Dakota @ 3120'

WELL HISTORY:

Well completed May 5, 1952
in Madison Linc (5608-17')
(5626-38') * old perms

Sgsd and reperf

Recompleted in Heath (4864-
82') in (11/69) but sgsd off
w/ 100 SX cnt in (E/75)

Pumping Assembly: 1 1/2" x 6 1/2" @ 5611'

Top Anchor @ 5580
SN @ 5677

Top 178' @ 2 1/2"
88' 7/8" rods

131' 1/4" rods

REMARKS: 7" CSG details:

55 jts 2 1/2" x 2408'

78 jts 2 1/2" x 3350'

ATTACHMENT C-1

W/P

WPB III (3/6/5)

LEASE

Huber

LOCATION

E NE

COUNTY

Roosevelt

WELL No

#1

FIELD

East Poplar

STATE

Montana

TD

5776'

KB

2104'

DF

GL

COMPLETION INTERVALS:

WELL HISTORY:

Well completed May 5, 1952 in
Madison (5608-17'), (5626-38')
& (5520-20').

Sgd Charles "A" + Heath (2/15)
Sgd "B-1" & "B-2" (6/77) +
reperf'd "B-1" (5608-16')

REMARKS:

7" CSG detail
55 gss 23 1/4" 2408'
78 gss 20 1/4" 3350'

10 3/4" SURF. CSG.

@ 1010' WITH

500 SACKS.

178 gss 2 7/8" 7-55 lbs

88 - 7/8" rods

w/ 2" pump

131 - 3/4" rods

Heath

(4850-82') Sgd w/ 1005XS (2/15)

TOC @ 4970'

Charles "A"

(5500-20') Sgd w/ 1005XS (2/15)

Boxer A/C @ 5580'

"B-1" (5608-16') Reperf'd (4/77)

"B-2" (5626-38') Sgd off.

Bauer model "K" retainer
@ 5650'

7" CSG. @ 5753'

w/ 500 SXS.

SERVICE & TESTING



HUBER NO. 1

COMPLETION DATA

3-14-52 Cemented surface with 500 sacks
4-30-52 Cemented production string 500 sacks
5-16-52 500 gals. Dowell XFW, 5609'-17', 5623'-38' flushed
 with 33 bbls. (down tubing)
5-06-52 McCullough Bullet

Casing: 55 jts. 23# 2408'
 78 jts. 20# 3350'

Tubing 1 - 13' stringer - 2 tubing seal nipples
 1 - 2½" EUE Baker Safety jt. 1 jt. above F
 1 - tubing seal nipple locator with extens
 1 - 10'x2" NU 10 rd. perf. prof tube

SCHLUMBERGER TOPS

Well Name: HUBER NO. 1

Location: SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10, T28N, R51E

Greenhorn	2330
Muddy	2908
Dakota	3120
Ellis	3900
Piper	4254
Amsden	4691
Otter	5015
Kibbey	5130
Charles	5383
TD	5776

FORMATION RECORD

<u>FROM</u>	<u>TO</u>	<u>TOTAL FEET</u>	<u>FORMATION</u>
0	0	660	Shale
660	870	210	Shale & Sand
870	1209	339	Shale
1209	1590	381	Shale w/strks Sand
1590	2214	624	Shale
2214	2328	114	Sand w/strks Shale
2328	2494	166	Shale
2494	2715	221	Black Shale.
2715	2810	95	Shale & Sdy stks
2810	2873	63	Shale
2873	2894	21	Core #1 Shale hard dk grey
2894	2906	12	Shale
2906	2945	39	Sand (Muddy)
2945	3205	260	Shale
3205	3305	100	Shale & Sdy Shale
3305	3377	72	Sdy Lime & Shale
3377	3385	8	Sand
3385	3414	29	Sandy Shale
3414	3431	17	Sand
3431	3608	177	Sand & Shale
3608	3634	26	Sky Lime & Shale
3634	3660	26	Sand
3660	3670	10	Lime
3670	3720	50	Sand & Shale
3720	3843	123	Shale
3843	3974	131	Sdy Shale
3974	3999	25	Shale
3999	4043	44	Shale & Shell
4043	4137	94	Shale
4137	4304	167	Shale & Lime Strk
4304	4478	174	Shale
4478	4742	264	Shale with Lime Strk
4742	4839	97	Lime, Sand & Shale
4839	4900	61	Sand & Red Shale
4900	5005	105	Shale & Sand Shells
5005	5028	23	Sdy Shale
5028	5073	45	Shale & Lime
5073	5397	324	Shale & Sdy Lime
5397	5449	52	Shale & Lime
5449	5484	35	Anhydrite & Lime
5484	5513	29	Sdy Shale
5513	5539	26	Core #2 Rec 25': 7' oolit: lime & xylene limestone o: saturated, 6' anhydrite, dolomite fractured water, anhydrite, 6' limestone w: one small fracture with sl of oil & 6" black shale o bottom.
5539	5598	59	Shale & Lime

Page 2 Formation Record

5598	5603	5	Sdy Shale
5603	5608	5	Grey Shale & lime
5608	5624	16	Anhydrite & Lime
5624	5776	152	Anhydrite, lime
TD	5776		Limestone

Producing Horizon Formation Record

5608	5617	Xy Line	Limestone B-1
5626	5638	Xy Line	Limestone B-2

HUBER NO. 1

WORKOVER HISTORY NO. 2

Lease & Well Number: Huber No. 1

Field: East Poplar County: Roosevelt State: Montana

Well Location: SE NW Section 10, T28N, R51E

STATUS PRIOR TO PRESETN JOB:

Date Completed: May 5, 1952

Producing Zone: Heath Sand Perforations: 4864'-82' KB 1'

T.D. 5953' PBSD: 5650' Latest Test: 29 BOPD 94 BWPD

JUSTIFICATION OF WORKOVER:

Believe well formation plugged off, try to re-establish a better rate.

SUMMARY OF WORKOVER:

- 11-22-69 Rigged up, pulled rods, released Baker Anchor. Started out of hole with tubing.
- 11-23-69 Finished pulling tubing, ran back Halliburton RTTS PKR and set at 4817' KB. Rigged up well head to frac. My-T-Fraced Heath Sand. Pressured annulus to 700 psi, pumped in 4000 gallons base pad; 4000 gallons My-T-Frac pad; 2500 gallons My-T-Frac with 1# per gallon 10-20 sand; 2500 gallons My-T-Frac 1# per gallon 8-12 sand; 2500 gallons My-T-Frac with 3# per gallon 8-12 sand; 3500 gallons My-T-Frac with 4# per gallon 8-12 sand. Flushed with 2800 gallons. Breakdown pressure 2800 psi, maximum 4400 psi, average pressure 3900 psi. Total fracture gallons 11,000, total sand 26,500#'s. Shut well in for 24 hours.
- 11-24-69 Released RTTS packer and re-set at 4819' KB, flanged up well head, ran rods and plunger. Rigged down, put well on pump.

Recap of Workover:

Final Perfs: 5626'-38', 5608'-17', 5500'-20', all packed off 4864'-82' open
Final PBSD: 4917' (Retrievable Bridge Plug)

Production before treatment - 27 bbls oil & 105 bbls water per day.

Production after treatment - 66 bbls oil & 277 bbls water per day.

HUBER NO. 1
WORKOVER

- 3-03-69 Pulled rods and tubing, ran cement bond and correlation log. Set retrievable bridge plug at 4980' and perforated Heath 4870'-74' with one shot per foot.
- 3-04-69 Ran packer on tubing and set at 4780'.
- 3-05-69 to
- 3-07-69 Swabbing water with a trace of oil.
- 3-08-69 Prepared to squeeze perforations - Halliburton truck broke down. Bad weather prevented work until 3-09-69.
- 3-09-69 Squeezed perforations with 100 sacks DOC. SI overnight.
- 3-10-69 Released packer, circulated cement out of hole. Well filled with water with trace of oil and overflowed at indeterminate rate.
- 3-13-69 thru
- 3-25-69 Put well on pump and tested to tanks. Produced about 15 barrels water per hour with slight trace of oil.
- 3-25-69 thru
- 3-31-69 Moved in rig. Ascertained bridge plug was leaking. Ran new bridge plug to hold. Swabbed well down.
- 3-31-69 Perforated Heath from 4864-82 with 20 holes. Swabbed well dry.
- 4-01-69 Acidized with 500 gallons followed with 200 barrels treated lease oil - displaced oil at $2\frac{1}{2}$ barrels per minute at 2550 psi.
- 4-02-69 After swab testing, put well on pump.
- 4-03-69 thru
- 4-27-69 Testing on pump. Averaged approximately 30 BOPD and 8 BWPD.
- 4-28-69 thru
- 5-02-69 Moved rig back on well, pulled rods and tubing and released bridge plug. Well again filled with water. Ran retrievable bridge plug and packer. After numerous settings, determined that water is coming from below 5468', or from the Charles "A" Zone.
- 5-03-69 Set new bridge plug 4917', packer at 4816', fraced Heath with 15,000 gallons salt water and 9500# sand. Broke formation with 4300 psi, pumped in water and sand at 12.5 barrels per minute at average pressure of 3400 psi. Immediate SI pressure 2050 psi, 5 min. pressure 1800 psi, 10 min pressure 1700 psi. Let set overnight.

- 5-04-69 Pulled packer and reran tubing. Ran rods and placed on pump. Started pumping at 6:00 p.m.
- 5-05-69 While recovering load water, pumped oil at rate of 230-260 barrels per day. Currently about 25% water with an estimated 100 barrels of load water to be recovered.

NOTE: The bridge plug has been left in the hole pending a decision as to future plans to produce the Charles.

HUBER NO. 1

WORKOVER HISTORY NO. 3

Lease & Well Number: Huber No. 1

Field: East Poplar County: Roosevelt State: Montana

Well Location: SE NW Section 10, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date Completed: May 5, 1952

Producing Zone: Heath Sand Perforations: 4864'-82'

T.D. 5953' KB PBDT: 5650' CIBP KB: 9'

Date of Last Workover: November 24, 1969 (My-T-Frac)

Latest Test: 15 BOPD 385 BWPD

JUSTIFICATION OF WORKOVER:

Dual complete well to put Madison B-1 and B-2 back on production with Heath.

SUMMARY OF WORKOVER:

- 9-25-71 Moved Prather Rig in. Pull out of hole with rods, rig to pull tubing. Anchor released, start out with tubing. Start in with BP Retriever. SDFN.
- 9-26-71 Resume running retrieving tool. In with 2-7/8", 8rd. tubing. .5 jts 2-7/8" Hydrill tubing picked up, tagged sand at 4876', rig up circulating equipment. Start circulating sand off bridge plug. Sand off, bridge plug released. Tubing plugged, reverse circulate. Well flowing oil to pit, circulating water down casing to kill well. Start out with tubing and BP. Will get truck in am to kill well with heavy salt water.
- 9-27-71 Turned well to flow line, flowing Heath oil. Well dead start pulling tubing. Out with bridge plug, start in with scraper. Well flowing. In with scraper, tagged Model D at 5600' KB. Circulated water down casing, start out with scraper laying down all 2-7/8" pipe. SDFD.
- 9-28-71 Resume laying down tubing. Out with tubing and scraper. Start in with 2-7/8" production string. Shut down, have to overhaul slips. Resume running long string. Cannot get into Model D. Circulate and work tubing. Start out with tubing to check seal assembly. Out with tubing, seal assembly show imprint of slip segment lost on last workover. SDFD

9-29-71 Run magnet on sand line to try and get slip segment. Ran magnet several trips, no success. Rig up barbed spear to try and pull segment loose. Start in with barbed spear on rods. Have to go to #3 to get more rods. Working spear through Model D. Start out with spear, cannot jar slip loose. Rig up Baker Sand Line Drill to knock out "D". Start Drilling. Made 3 runs, getting iron from Model "D". SDFD.

9-30-71 Resume sand line drilling, Baker Rep. believes Model "D" knocked out.

10-01-71 Start in with bit & scraper to clean out hole. Start circulating and drilling. Cannot make any hole, drilling on iron. Shut down for day, rig tongs will not stand up to rotating tubing, will have to get power sub and resume drilling in am.

10-02-71 Power sub on location, rig up to drill. Very little hole made, getting iron, rubber and frac sand. Cannot make any hole, start out with bit. Rig to run Baker Sand Line Drill. Sand line drill picked up another load of iron. Baker Rep thinks it's the CIBP. Shut down to re-check tally and down hole equipment. Shut down for day, will run depth-ometer to verify depth.

10-03-71 Make run with Baker Sand Line Drill. Depthometer indicated depth of approx. 5600'. Start out with Baker Sand Line Drill. Drill picked up a load of iron. Drill picked up a load of iron and cement. Drilling on cement, lay down sand line drill. Rig to run bit and start in with bit. Rig up circulating equipment. Start drilling on cement at 5605'. Drilled 5' cement, dropped 10', drilled 10' cement and stringers to CIBP at 5650' KB. Circulated hole clean. Start out of hole with tubing. SDFD.

10-04-71 Resume pulling tubing, out with tubing. Rig up wireline to set "D", set at 5585' KB. Start in with production string as follows:

Seal Assembly	5585'
4 jts 2-3/8" EUE 8rd tbg.	
Model "N" Packer	5459'
16 jts 2-7/8" EUE 8rd tbg	
Dual string anchor	4947'
28 jts 2-7/8" PH-6 Hydrill tbg.	
2 1/2" Seating Nipple	4005'
119 jts 2-7/8" PH-6 Hydrill tbg.	
1 - 6' 2-7/8" Hydrill Pup	
1 - jt 2-7/8" PH-6 Hydrill tubing.	

Tubing landed, 20,000 # tension on Model "N" Head bolted on, adapter installed to run 2-3/8" CS Hydrill Tubing (second string). Start picking up and running 2-3/8" string. SDFD.

10-05-71 Resume picking up 2-3/8" tubing. 2-3/8" CS Hydrill tubing stung into dual anchor and landed with 17,000# tension. Cement returns indicate ~~Madison~~ Madison may be cemented off. Rig crew start to gather rods and change out 7/8" boxes.

10-06-71 No work today waiting on swab cups.

10-07-71 No work waiting on swab cups.

10-08-71 Tubing swabbed dry. 30 min. shut in, no fillup. 30 min. shut in, no fillup. 30 min. shut in, no fillup. Shut down for day.

10-09-71 Rig up wireline to reperforate. Could not get in hole with gun, lost 9' section off bottom of gun. Fluid level hit at 400' from surface. Oil on part of gun that came out. Decided not to perforate as we have fluid entry. Start out of hole with 2-3/8" Hydrill string. Out with 2-3/8" string, rig up to pull 2-7/8". Start out with 2-7/8" tubing. Out with long string, seal assembly on Model "N" tore up, called Baker to get redressed. Could not get Baker, SDFD.

10-10-71 Remove perforating gun section, start in with 2-7/8" tubing, move seating nipple to 4914'. 2-7/8" tbg. in head on, flanged up. Tubing landed with 18,000# tension. Rig up to swab. Having trouble getting swab cups down. Getting only 1 run per cup. Swabbed tubing to seating nipple in 5 runs. Swabbed 1 run per hour, getting 700' fillup, water per hour. Swabbed until 5:00 pm, same rate, SDFD.

10-11-71 Swab well down, fluid level 20' from surface. Swabbed trace of oil, swabbed dry in 4 pulls. Rig up Dowell to acidize with 250 gal. 15%. Took four hours to move total of 8 barrels formation water and 6 barrels acid into formation. Well broke from 2500 to 2400 on last 1/2 barrel of acid put in. 15 min shut in, 600 psi. Released pressure, well began flowing small amount of water. Started swabbing. Swabbed to 4000' cups tearing up. Swabbing estimated 10 barrels per hour, from 3000' (fluid staying here) estimate 10% oil. Have to change cups every run. Fluid level at 2500'. Swabbing 10 to 20% oil. Tail end of run is approximately 5% oil. Swabbing 500' per run, 10 to 20% oil. Fluid staying at 3000'.

10-12-71 Fluid at surface, made 1200' swab run, 500' oil, 700' water. Rig to run 2-3/8" tubing string. Tubing as follows:

Anchor stinger

3 - jts 2-3/8" Hydrill CS Tubing

Seating Nipple

158 jts 2-3/8" Hydril CS Tubing

1 - 8', 1 - 10', 1 - 4' pup

1 jt 2-3/8" 2-3/8" Hydrill CS Tubing

Tubing landed with 20,000# strain. Flanged up head. Start in with 2" pump and 7/8" rods, change all rod couplings to 7/8" slim-hole. SDFD. Rod couplings breaking hard.

10-13-71

Resume running rods on both tubing strings. Well hung on, released rig. New flow line hook-up completed, started well pumping Madison Zone. Will start Heath Zone pumping when 456 Unit is set.

Re-cap of Workover:

Final Perforations: Heath 4864'-82'; A Zone 5500'-20' (isclated); B-1 Zone 5608'-17'; B-2 Zone 5626'-38'.

Final PBTD 5650 (CIBP)

Initial Potential: Madison 30 BO 360 BWPD
Heath 15 BO 360 BWPD

HUBER NO. 1

WORKOVER HISTORY NO. 4

Lease & Well Number: Huber No. 1

Field: East Poplar County: Roosevelt State Montana

Well Location: SE NW Section 10, T28N, R51E

STATUS PRIOR TO PRESENT JOB:

Date Completed: May 5, 1952

Producing Zone: Heath Sand & Madison B-1 & 2

Perforations: Heath 4864'-82': A Zone 5500'-20'; B-1 Zone 5608'-17'; B-2 Zone 5626'-38'

T.D. 5953' KB PBTD 5650' KB 9'

Date of Last Workover 10-13-71 Dual Completion

JUSTIFICATION OF WORKOVER:

Temporarily abandon Heath production except for periodically flowing off load oil and increasing production on Madison by using longer stroke pump.

SUMMARY OF WORKOVER:

- 8-10-72 Rigged up, pulled 3/4" rods on Heath string and layed them down. Pulled 7/8" rods in Madison string to coupling break at 4380'. Went in with grapple, got on box twice but tool pulled off. Came out to check too. Coupling is so worn we cannot catch it. Shut down until morning, will get mouse trap from Murphy to try to fish rods.
- 8-11-72 Ran Murphys mouse trap, could not get it on. Came back out made up tool to fit broken coupling by filing down a smaller grapple. Went back in latched onto fish, could not get pump to unseat. Worked rods for 1/2 hour, tool pulled off. Will have to strip out tubing. Called Acme Tool for slip type elevators. Came out with 2-3/8" Hydrill tubing string and layed it down. SDFD.
- 8-12-72 Worked tubing (2-7/8" Hydrill PH-6 String) for one hour trying to get loose from Model "N" packer. Tong snubber broke while we had 15 to 20 rounds torque in, floor man got hit with tongs and broke his arm, took man to hospital in Poplar. SDF day.
- 8-13-72 No work today, crew repairing damage to tongs & rig.
- 8-14-72 Worked tubing to try to get loose from Model "N" could not get out. Rigged to run rods and Acme hydraulic jars to try again for pump. Got overshot

on and jarred hard for 40 minutes, overshot pulled off. Believe no-go ring on pump is jammed down in seating nipple. Called for order, shut down for day.

- 8-15-72 Worked tubing for 2 hours, put 15 rounds in at 43,000#, got 4 back. Repeated this procedure pulling one additional point each time. Gradually got more torque back until we reached 52,000# when we were getting all back. Believe loss we did get was making up 2-7/8" EUE, 8rd., tubing below dual anchor. Shut down for orders.
- 8-16-72 Waiting on orders.
- 8-17-72 Waiting on orders.
- 8-18-72 Ran sand line and tagged rods, flagged line. Hung tubing at 40,000# and turned left to try to get deep back-off. 8' sub on top of string broke out. Screwed sub back in, turned left and sub broke out again. Screwed back in as tight as we could. Turned tubing left 25 turns, acted like something came loose, picked up tubing but we're still hung. Tried several more time believe tubing is spinning in packer but won't release. Called Dia-Log for back-off, has to wait 4 hours before they could be on location. After Dia-Log got on location we picked up tubing to remove 8' sub on top and tubing parted 1 joint and one 6' sub below surface. (Must have backed off our last try). Had tough time getting screwed back in but finally did. Rigged up Dia-Log to back off tubing above rod break. Tagged rods at 4380', picked collars at 4331', 4298' and 4364'. Torqued tubing 5 rounds to left and fired string shot. Backed off tubing at 4364'. Pulled tubing out. SDFD.
- 8-19-72 Started in with wash pipe to swallow tubing and rods to dual string anchor. Took all morning to pick up pipe and clean it out. Ran tubing on top of wash pipe to anchor. Cut tubing off 1 joint up from dual anchor. Pulled tubing to fish and shut down for day as we did not have time to strip rods, tubing and washpipe out before dark.
- 8-20-72 Backed off rods and got everything but hold-down assembly. Layed rods down as they were to worn to reuse. Pulled tubing out of washpipe. Pulled wash pipe and layed it down. Went back in with tubing and right hand release overshot. Shut down for night as could not get Dia-Log before morning, to back off again.

8-21-72

Rigged up Dia-Log to back off tubing. Located Model "N" Packer at 5433' to 5437', located collars at 5401', 5370' and 5469'. Backed off tubing at 5401'. Came out with tubing; left 1 jt. on packer. Went back in with Baker On-Off tool on bottom of string and took out dual anchor. Landed tubing in donut with 20,000# tension. Made up well head and ran rods and pump. Hung on rig blocks as we need crew to make up new bridle and move walking beam ahead.

8-22-72

Rig crew clamped off rods, cleaned up and rigged down. Released rig. Roustabout crew refitted well head to flow line, made new bridle, moved walking beam and rebalanced unit. Well started pumping at 5:00 pm.

Recap of Workover:

Heath 4864'-82' (open to casing to flow off)

Madison A Zone 5500'-20' (isolated)

Madison B-1 5608'-17' (pumping)

Madison B-2 5626'-38' (pumping)

Initial Potential:

Madison 35 BOPD 360 BWPD

Heath estimate possible 5 barrels per week.

HUBER NO. 1

WORKOVER HISTORY NO. 5

Lease & Well Number: HUBER NO. 1

Field: East Poplar County: Roosevelt State: Montana

Well Location: se nw Section 10, T29N, R51E

STATUS PRIOR TO PRESENT JOB:

Date of Last Workover: August 22, 1972

TD: 5953' PBD: 5650' (CIBP) KB: 9'

Producing Zone: Heath, Madison "A", B-1 and B-2

Latest Test: Pumping 25 BOPD 2373 BWPD with Reda Pump

JUSTIFICATION OF WORKOVER:

Squeeze off "A" Zone and Heath Zone to shut off water.

SUMMARY OF WORKOVER:

- 1-25-75 Rig up and pull Reda Pump.
- 1-26-75 Run in with Bridge Plug and Packer. Release rig to go to Vida.
- 1-31-75 Rig up.
- 2-01-75 Pulled 15 joints, set RBP, pulled 1 joint, set PKR, swabbed well to pit.
- 2-03-75 Swabbed well to pit, (Heath Zone), received 70 bbl fluid, trace oil in 3 hours, swabbing from 2500'. Reset RBP & PKR and swabbed "A" zone. Received 85 bbls fluid, trace oil in 3 hours.
- 2-04-75 Pulled RBP & PKR, went back in with drillable bridge plug and PKR. Plug would not set.
- 2-05-75 Pulled PKR and plug, installed new drag springs on plug, ran back in with plug and packer. Set plug at 5555'.
- 2-06-75 Tested plug to 1500, pulled 8 joints, set packer at 5362'. Pumped down casing to get injection pressure on Heath. Pumped cement down tubing to squeeze "A" Zone. Could not get well to take fluid at 3500 psi. Try to reverse out cement, Heath zone started thiefing. Circulated down tubing and out casing. Cleared casing and recleared tbg. Left 3 bbl cement in casing below packer. Staged cement in well at 1 bbl every 5 to 7 minutes. Well would not squeeze. Over displaced cement $\frac{1}{2}$ bbl. Well did not squeeze or break down. Released packer and moved to 4735'. Well did not flow back. Pressured casing to 1000#, casing held. Pumped 1.5 bbl per min. into Heath at 2500 psi (injection test).

- 2-07-75 Came out with tubing, ran back in with RBP and PKR. Set RBP at 4921'. Tested plug and spotted 2 sacks sand on it. Set packer at 4735'. Spotted cement and squeezed Heath zone to 2400 psi. Shut in over night.
- 2-08-75 Released pressure off well, came out of hole with packer. Went back in with bit and scraper. Rigged up drilling equipment.
- 2-10-75 Drilled out cement, circulated RBP clean, pressured to 1000# psi, held. Rigged down drilling equipment, started out of hole with bit and scraper.
- 2-11-75 Finished pulling bit and scraper, went back in to pick up RBP. Had to circulate hole with power sub to get RBP released. Pulled RBP.
- 2-12-75 Went back in with bit and scraper to drill out cement on "A" zone. Drilled out 2' cement, went in and tagged CIBP. Pressured well to 800, went to 700 in 15 min. (no squeeze on "A" zone). Pulled bit and scraper.
- 2-13-75 Ran back in with PKR, set it at 5426'. Swabbed well at rate of 23 BPH from 3500' (water).
- 2-14-75 Rigged up Halliburton, pumped water to fill hole, ran out of water, waited for another load of water. Spotted acid, pressured PKR, pressure would not hold on tubing. Reset PKR, still would not hold. Reversed out acid. Came out of hole with PKR, found collapsed tubing jt. Ran PKR back in, set at 5486', pressured casing to 1000, tubing to 2000, pressure held. Spotted acid. Pressured tubing to 3000, bled off slow. Pressured to 4000, well started to take fluid. Staged acid at 4000 psi for 15 min., got 1½ bbl in. Pressured to 4200, well broke down to 3000 at 3½ BPM. Over displaced acid 4 bbl, shut well in.
- 2-15-75 Reset PKR at 5360' for squeeze. Squeezed "A" Zone to 3900 psi. Reversed out excess cement. Well took 17 sx. Repressured tubing to 1500, shut well in.
- 2-17-75 Pulled packer, went in with bit and scraper. Tagged cement at 5360' started drilling out cement.
- 2-18-75 Drilled out cement, started drilling on CIBP.
- 2-19-75 Drilling on plug all day, stopped making hole, came out with bit.
- 2-20-75 Went in with clusterized shoe, drilled rest of plug and started drilling on old Model "D" PKR that was stuck in hole.
- 2-21-75 Drilling on "D", stopped making hole, shut down for day as it was too windy to pull tubing.

- 2-22-75 Came out with shoe, went in with overshot to jar PKR loose. Latched onto fish and jarred for 1/2 hour. Pulled 95,000 on fish, let set for 1/2 hour. Jarred again for 1/2 hour, started moving packer. Started jarring PKR out of hole, tubing parted. Pulled tbg to put on another over shot.
- 2-24-75 Went in and latched onto parted tubing. Worked PKR to try to free it up. Could not get PKR to come loose. Drilling line on rig got bad, could not continue to jar. Tried to release bottom overshot, could not release it after 2½ hours working it. Shut down to replace drill line.
- 2-26-75 Jarred on packer for 2 hours, no progress. Worked over shot for 2 hours, no progress. Called Dia-Log to cut off tubing below overshot. Waited on Dia-Log for 3 hours. Dia-Log tore up transmission in truck as they pulled on location. Shut down for truck repair.
- 2-27-75 Dia-Log could not get truck fixed, called Go-International to cut tubing. Could not get below 5385' with cutter. Waited for smaller cutter, went back in but still could not get down below overshot. Could not release upper overshot either, cut tubing off at 5247' and pulled top overshot out.
- 2-28-75 Went in with pack-off type overshot, accillarator sub and drill collars. Circulated hole. Latched onto tbg. started jarring and circulating, packer would not move. Jarred top overshot off, came out to redress.
- 3-01-75 Ran back in latched onto tubing, jarred on PKR, still would not move. Went in with tubing cutter, still could not get cuter below bottom overshot. Released top overshot, shut down for orders.
- 3-03-75 Latched onto tubing again, rigged up Dia-Log to try to spud down to 5385'. Got down and located packer still at 5565'. Any headway we thought we made was caused by tubing stretch. Went in with back off tool, backed off tubing at change over sub at 5552'. Came out of hole with tubing. Left fish, overshot, bumper sub and jars in hole. Went back in with another set of jars, acc. sub and drill collars and screwed into change over sub on top of first set of jars.
- 3-04-75 Jarred on PKR for 1½ hour, fish came loose. Came out of hole with tools and guts of Model "D" PKR. Went in with mill, milled on PKR for one hour, made about 3'. Got cement and iron in returns. Material was probably from old Model "N" packer that was drilled up prior to this job.

- 3-05-75 Milled on packer for 6½ hours, made 1' of hole. PKR went down hole about 3½'. Milled for one hour did ~~not~~ make any hole. Changed out mill.
- 3-06-75 Milled on packer for 1½ hours, packer dropped a little. Pushed packer down hole to 6540'. Came out of hole and layed down all tools. Picked up Reda Pump.
- 3-07-75 Ran Reda Pump back as follows:
Reda Motor & Pump Assembly (Btm of Reda at 5577')
1 - 6' x 2-7/8" EUE 8rd., sub
174 jts 2-7/8" EUE 8rd., tbgs. 5519'
Hooked up well head and Reda cable to panel. Reda would not run. Found broken jumper on power line. Called REA to fix it. Started Reda Pump.
- 3-08-75 Reda pumping off bad, made 11 oil, 245 water in 14 hours.
- 3-09-75 thru
- 3-11-75 Reda pumping off even with well head choked. Shut Reda down will acidize well.
- 4-01-75 Rigged up pulled Reda pump. Cable bad. Had to pull pump wet as bar would not go down to shear bleeder valve. (Bad joint of tubing).
- 4-02-75 Went in with packer, acidized well with 1000 gal. 15% acid, shut well in.
- 4-03-75 Swabbed well at rate of 17 BPH with fluid level at 1000'. Started out of hole with packer.
- 4-04-75 Finished pulling packer, start in with Reda Pump.
- 4-08-75 Well pumping 30 BOPD, 1295 BWPD.

HUBER NO. 1

WORKOVER HISTORY NO. 6

Lease & Well Number: Huber No. 1
Field: East Poplar County: Roosevelt State: Montana
Well Location: SE NW Section 10, T29N, R51E

STATUS PRIOR TO PRESENT JOB:

Date of Last Workover: July 4, 1975
TD: 5953' PBTD: 5650' (CIBP) PBTD: 5627' (cement) KB: 9'
Producing Zone: Madison B-1 and B-2
Latest Test: Pumping 3 BO 405 BW

JUSTIFICATION OF WORKOVER:

Squeeze off existing perforations, log and reperforate.

SUMMARY OF WORKOVER:

- 5-28-77 Rigged up and pulled rods and tubing.
- 5-31-77 Picked up 4 drill collars, concave mill and jars. Ran in hole and tagged junk at 5635'. Drilled 2'6" in two hours to 5637.5'.
- 6-01-77 Drilling on junk, drilled to 5639'.
- 6-02-77 Drilling on junk, drilled to 5641', tripped tbg. to change mill.
- 6-03-77 Drilling on junk, drilled to 5655'.
- 6-04-77 Drilling on junk, drilled to 5657', tripped tbg to change mill.
- 6-06-77 Drilling on junk, drilled to 5660', C.O.H. with tbg. and mill.
- 6-07-77 W.I.H. with shoe and 1 joint of wash pipe, cleaned out to 5720', C.O.H. with tubing and tools, released Acme Tool.
- 6-08-77 Shut down, could not get loggers today.
- 6-09-77 Rigged up Schlumberger ran TDT log from 5720' to 4800'. W.I.H. with tubing and PKR, set PKR at 5458'.
- 6-10-77 Rigged up Halliburton, established injection rate of 2 BPM at 2500 psi. Mixed 100 sx Class "G" cmt and squeezed well to 3500 psi; reversed out 60 sx cmt to pit. Repressured to 2500 psi, formation still taking cement. Got well to squeeze to 2000 psi. Pulled 4 stands. SDFD.

- 6-11-77 Trip out of hole with tubing and packer. T.I.H. with bit and scraper. Cleaned out to 5737'.
- 6-13-77 T.O.H. with bit and scraper, rigged up Schlumberger and perforated 5664'-68' 4 shot per foot with Hyper-Jet. T.I.H. with tubing and packer. Set tail pipe at 5683' packer at 5652'.
- 6-14-77 Swabbed well down in 3 pulls. Rigged up Halliburton. Spotted 250 gallons 15% acid over perfs and let soak for 10 minutes. Displaced acid, break down 2900, max pressure 3000#, average pressure 2800, ISIP 2650, 5 min. 2000, 15 min. 1900. Rig to swab (well on vacuum after 1 hour). Swabbed 20 bbls fluid to TD, swabbed 1/2 BFPH, water did not receive total load back, no acid back.
- 6-15-77 SITP 10, fluid level 5300'. Pulled 2 bbls fluid 60% oil. No fluid entry for next 3 hours. Rigged Dowell to acidize. Pumped 500 gallons 28% acid in at 3 BPM 2800 psi. During acid job packer released, continued pumping acid until perforations were cleared. Released packer and reversed 45 bbls water down casing. Reset packer and rigged to swab. Swabbed acid, gas and water with trace of oil for 3 runs, well dried up. Received 21 bbls load back, well swabbed 1/4 to 1/2 BPH for last 3 hours, trace of oil.
- 6-16-77 Reset packer at 5580' swabbed B-1, B-2 & B-3 Zones. Got acid gas and spent acid on third run, indication acid went into old B-2 perfs around packer. Swabbed 90 BF in 4 hours (water) T.O.H. to change PKR. T.I.H. with new packer.
- 6-17-77 SITP 50 fluid level at surface. Swabbed well all day 15 BWPB trace oil.
- 6-18-77 Set packer at 5653' rigged up Dowell to re-acidize. Spotted 500 gallons of 28% acid. Pressure came up on casing while trying to displace acid. Reversed out acid. Reset packer at 5580', casing would hold 1500 psi and well would not circulate. Reset packer at 5653', well would circulate. Well apparently communicated between B-2 and B-3 perfs behind pipe. T.O.H. with tubing and packer to remove tail pipe. T.I.H. with tubing and packer set packer at 5458'.
- 6-20-77 Rigged up Halliburton to squeeze. Establish injection rate of 2 1/2 BPM at 1900 psi. Mixed 50 sx Class "G" cement. Squeezed well to 2000 psi. Pulled 5 stands pipe. Tubing pressure 600 psi. SDFD.
- 6-21-77 T.O.H. with tubing and packer. T.I.H. with bit and scraper cleaned out well to 5627'.

- 6-22-77 Rigged down drilling equipment . Lost well head stud down casing while removing D.H.P. T.I.H. easy stud came with scraper but had to remove B.O.P. to get it through casing head. Rigged up GoInternational perforated 5608'-16', 4 shots per foot. T.I.H. with tubing and packer. Set packer and swabbed well dry in 4 runs.
- 6-23-77 SITP 0 fluid level 4200'. Rigged up Halliburton and acidized with 500 gallons 15% acid. Displaced acid at 1/4 BPM at 2500 psi. ISIP 2400, 15 min 900. Swabbed 96 BF in 6 hours 10 to 39% oil. Last 2 hrs 9 BFPH.
- 6-24-77 SITP 25 fluid level 1000, swabbed well at rate of 9 BFPH 15% oil. T.O.H. with tubing and packer.
- 6-25-77 T.I.H. with production string as follows:
- | | |
|----------------------------|-------|
| 1 joint 2-7/8" EUE 8rd tbg | 5611' |
| Baker anchor | 5580' |
| Seating Nipple | 5577' |
| 178 joints tubing | |
| 133 - 3/4" rods | |
| 88 - 7/8" rods. | |
- Put well on production.

Procedure to Deepen Huber #1 to
Mission Canyon

1. MIRU workover unit.
2. POOH w/88 - 7/8" rods & 131 - 3/4" rods.
3. Release tbg anchor @ 5580' & POOH w/anchor & 178 jts 2-7/8" tbg.
4. MIRU circulating equipment & 2-7/8" rental drill pipe (\pm 6500').
5. PU 6-1/4" bit & scraper. Make bit & scraper run to PBTD @ 5650'. Circulate hole clean. POOH
6. PU cement retainer. RIH on tbg & set @ \pm 5580'.
7. Sting into retainer. Test backside to 1000#. Establish rate down tbg.
8. If backside doesn't test, POOH w/tbg & stinger.
9. PU RBP & test pkr. Set RBP @ 5500' & test.
10. Proceed uphole to isolate leaks, if RBP tests ok.
11. Repair leak in csg as per Denver recommendations.
12. Once 7" csg tests good remove RBP @ 5500'.
13. PU stinger & GIH & circulate on top of retainer. Sting into retainer, pressure up on backside & establish rate down tbg.
14. Mix & pump 50 sxs Class 'G' cement in perms @ (5608-16') and squeeze off.
15. WOC. Drill out retainer @ 5580' & test squeeze.
16. Drill out Baker Model 'K' cement retainer @ 5650'. Begin mixing mud & prep. to deepen to Mission Canyon.
17. Drill out bottom of 7" & drill to 6450'.
18. Condition hole to run logs.
19. Run a GR-Neutron log.
20. MIRU liner to be ran. (5" 11.5#/ft) *Can run 4-1/2" ob csg. X114.*
21. GIH w/liner (approximately 800'). Run liner from TD \pm 6450' to ^{5500'} 5650'.
22. Cement liner as per service company recommendation.
23. WOC. GIH w/bit & scraper to check PBTD. Drill out to bottom & circ. hole clean.

24. Run CBL to check bonding.
25. GIH w/gamma gun & perf Mission Canyon as per OKC Engineering's recommendations.
26. Treat Mission Canyon as per need.
27. GIH w/following injection string assembly:
 - Model 'D' pkr @ 6150'
 - 2-7/8" IJ tbg (550') 6150' to 5600'
 - x/o
 - 2-7/8" tbg 5600' to surf.
28. Wait on all government approvals & OK's.
29. Put well on injection.

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR	The Polumbus Corporation	DATE	November 18, 1974	LAB NO.	282930317234
WELL NO.	Huber No. 1	LOCATION	Sec. 8-28N-51E	SENE	
FIELD	Poplar	FORMATION	Heath - Madison		
COUNTY	Roosevelt	INTERVAL			
STATE	Montana	SAMPLE FROM	Production		

REMARKS & CONCLUSIONS: Clear water.

Water sample separated from crude oil:

API gravity of crude oil @ 60 °F - - - - - 29.9

Water content of crude oil, % by volume - - - - - 90.0

Total sulfur, % by weight - - - - - 0.94

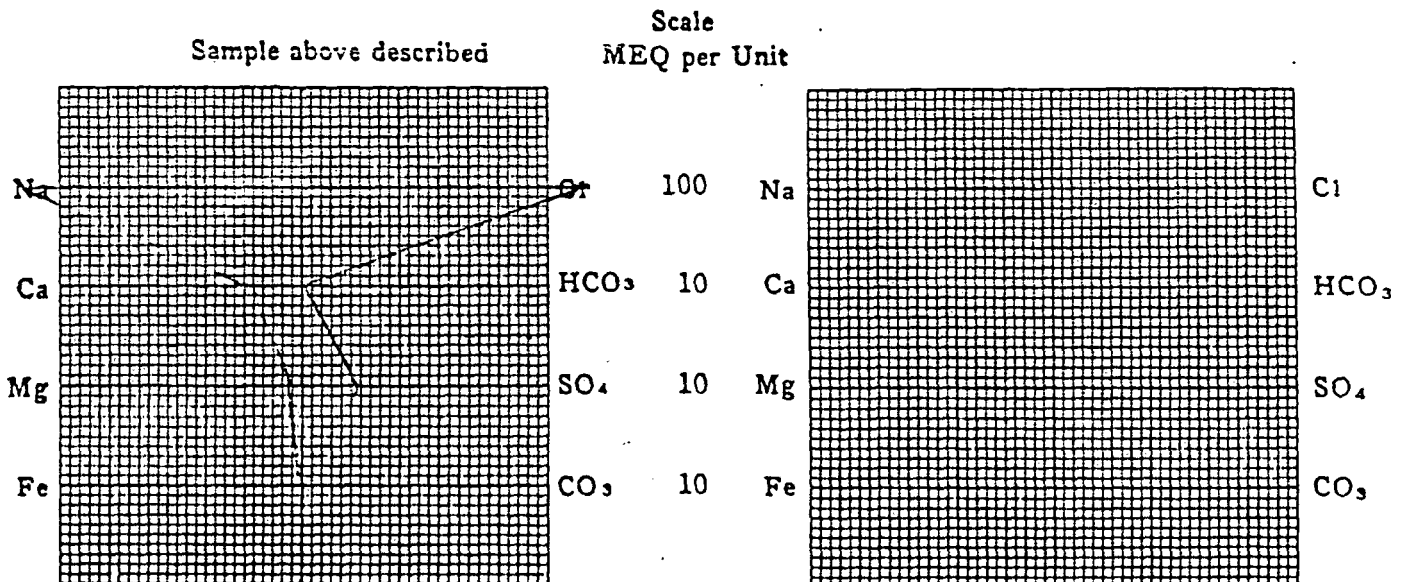
Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	64950	2825.34	Sulfate	2700	56.16
Potassium	704	18.02	Chloride	101000	2848.20
Lithium			Carbonate	0	0
Calcium	1046	52.20	Bicarbonate	220	3.61
Magnesium	151	12.41	Hydroxide		
Iron	-		Hydrogen sulfide		
Total Cations			Total Anions		
2907.97			2907.97		

Total dissolved solids, mg/l	170659
NaCl equivalent, mg/l	169359
Observed pH	6.3

Specific resistance @ 68°F.:

Observed	0.065	ohm-meters
Calculated	0.056	ohm-meters

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)

NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter

Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

STIMULATION TREATMENT REPORT

DOWELL

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE

4-14-71

PRINTED IN U.S.A.

WELL NAME AND NUMBER

Huber #1

LOCATION

East Poplar Unit

CUSTOMER REPRESENTATIVE

MR. NCCS

TREATMENT NUMBER

15-02-6722

POOL

East Poplar Unit

FORMATION

Heath

JOB DONE DOWN

TUBING A ☒ CASING B ☐ ANNULUS C ☐

ALLOWABLE PRESSURE

TBG: 3000 CSG:

COUNTY

Roosevelt

STATE

MONTANA

TYPE OF WELL

OIL A ☒ GAS B ☐ WATER C ☐

TNJ.

D ☐

TYPE OF SERVICE

Platformate

AGE OF WELL

NEW WELL A ☐ REWORK B ☒

TOTAL DEPTH

CIRC. BHT.

CUST. NAME

EA. Columbus JR.

CASING SIZE

CASING DEPTH

TUBING SIZE

TUBING DEPTH

LINER SIZE

LINER DEPTH

PACKER TYPE

MAX. DEPTH

OPEN HOLE

CSG. OR ANRL. VOL.

TBG VOLUME

STATIC BHT.

CITY, STATE & ZIP CODE

Denver Colorado 80202

REMARKS:

Pump 1000 gal Reformat with 4-66 in Fr-Flt
 Follow with 500 gal Reformat with 5-90 Fr-Flt
 Follow with 2 drums L-40 over flush 100 BBL

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 7:00

TIME	INJECTION		PRESSURE		SERVICE LOG
	RATE	BBLS IN	CSG.	TBG.	
8:20					Pressure check lines Hold Safety Meeting
8:30					START Reformat Solvent down tubing to Spot
8:53	1	24		200	Reformat with 4-66 in START Reformat & Fr-Flt
8:56	1	27		200	Reformat to Spot Close Basing Valve START dsg
8:59	1	30		400	Reformat over Perfs
9:03	2	36		1200	STOP Pump Reformat in tubing Mix L-40
9:23	1 1/4			400	START Pumping L-40 down tubing with oil
9:40	1 1/4	56		1800	L-40 in tubing START Flush
9:46	1 1/4	66		2000	Stop Pump Sol Reformat Soak.
10:46					Start Pumping
10:55	2			2400	Pumping 2 BPM at 2400 Psi
10:56	2	86		2400	L-40 in Formation Start one flush
11:05	2 1/2			2500	Pumping 2 1/2 BPM at 2500 Psi
11:10	2 1/2			2600	Pumping 2 1/2 BPM at 2600 Psi
11:15	2 3/4	146		2600	Stop Pump Job Complete
					ISDP-2400 10min-1800
					MAX Psi-2600 MAX Rate-2 3/4
					MIN Psi-400 min Rate-1 BPM
					Avg Psi-2200 Avg Rate-1.5 BPM
					TOTAL Load-146 BBLs

TIME LEFT LOCATION	AVG. LIQUID INJ. RATE	ADJ. RATE (SOLIDS INC)	TOTAL FLUID PUMPED		PROPS AND LIQUIDS INJECTED		
			WATER		TYPE	SIZE OR PURPOSE	AMOUNT
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE		Reformat	Solvent	1500
2600	2200	2600	IMMEDIATE 2400 15 MINUTES		U-66	Miscible	100
DOWELL LOCATION					Fr-Flt		5
DOWELL ENGINEER							
Blendine							
Jung Kennedy							
CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	<input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> UNKNOWN	PROD. BEFORE TREATMENT	<input type="checkbox"/> ALLOWABLE <input type="checkbox"/> TEST	PROD. AFTER TREATMENT DAYS <input type="checkbox"/> TEST <input type="checkbox"/> ALLOWABLE

DOWELL

DOWELL

DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND

VOICE NUMBER 5-05-75

{ Please indicate on all remittances
and send to: P.O. BOX 21

SERVICE ORDER RECEIPT

RMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

TULSA, OKLAHOMA 74102

TE P-3-73	CUSTOMER ORDER NO.	SHIPPED VIA Dowell	SERVICE FROM DOWELL STATION Williston	OUTPOST Glenview
--------------	--------------------	-----------------------	--	---------------------

ELL NAME AND NUMBER Huber #1	LOCATION AND POOL Polar
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE Sweet, Montana	TYPE OF SERVICE Acidize

CUSTOMER'S
NAME

Polumbus

ADDRESS

1000 Capital Life Center

CITY, STATE &
ZIP CODE

DENVER, COLORADO

ZIP CODE

SERVICE INSTRUCTIONS: Acidize (2) 500 gal RA-8 -
operator's instructions

ITEM NO.	QUANTITY	UNIT	Material, Equipment and Services Used	Unit Price	AMOUNT
1	EA		7 D Pump 31425	19.00	231.00
2	500 gal		15% RA-8	.65	325.00
4	gal		A-170 Inhibitor	8.50	34.00
50	mil		Mileage Pump 8F2	95	4750
50	mil		4 wheel tele 8F2	50	25.00
SUB TOTAL					
				621.00	
Gallons				License Fee	
Gallons				License Fee	
%				Tax on \$	
%				Tax on \$	

SUB TOTAL

621.00

Gallons

License Fee

Gallons

License Fee

%

Tax on \$

%

Tax on \$

WL-260-K PRINTED IN U.S.A.

64272

TOTAL

\$621.00

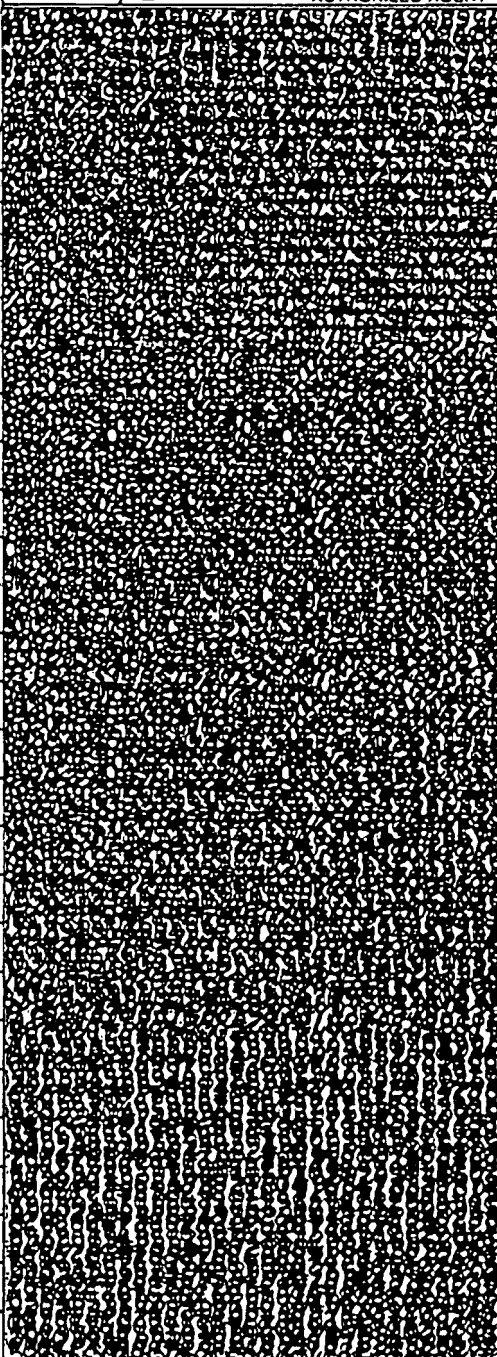
SERVICE ORDER

IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS.
I have read, understood and agreed to the terms & conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER

X Ted Kress

AUTHORIZED AGENT



DOWELL ENGINEER

PAYROLL INIT.

REK

TIG

RECEIPT: THE UNDERSIGNED HEREBY CERTIFIES THAT THE MATERIALS AND EQUIPMENT LISTED ABOVE WERE RECEIVED AND THE SERVICES WERE PERFORMED IN A WORKMANLIKE MANNER.

CUSTOMER

BY X 7.11.12

AUTHORIZED AGENT



73598

Inhibitor HAI-5.

CUSTOMER

WORK ORDER CONTRACT
AND PRE-TREATMENT DATA

FORM 1008

A DIVISION OF HALLIBURTON COMPANY
DUNCAN, OKLAHOMAATTACH TO
INVOICE & TICKET NO.

73598

DISTRICT Dendine, MontDATE 3-29-69

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO:

E A Polumbus Jr.

AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 1 LEASE Huber SEC. 10 TWP. 29N RANGE 51EFIELD E Popular COUNTY Renoville STATE Montana OWNED BY E A Polumbus

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

PACKER: TYPE Bahn Prod SET AT _____TOTAL DEPTH 56.29 MUD WEIGHT _____

BORE HOLE _____

INITIAL PROD: OIL _____ BPD. H₂O _____ BPD. GAS _____ MCFPRESENT PROD: OIL _____ BPD. H₂O _____ BPD. GAS _____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	<u>Used</u>	<u>23"</u>	<u>7"</u>	<u>0</u>	<u>5629</u>	<u>1000</u>
LINER						
TUBING	<u>Used</u>	<u>6.5</u>	<u>2 7/8</u>	<u>0</u>		<u>3500</u>
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS				<u>4870</u>	<u>4874</u>	<u>5</u>
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED _____

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton, hereunder.
- Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or services.
- At Customer's expense, to recover any Halliburton equipment, tools or instruments which are lost or damaged in the well, and if recovery cannot be had, to pay Halliburton for such equipment, tools or instruments unless such loss or damage is caused by the negligence of Halliburton.
- Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. There are no warranties, express or implied, of merchantability, fitness or otherwise which extend beyond those stated in the immediately preceding sentence. Halliburton limits its liability for breach of any warranty or for damages resulting from its negligence with respect to the use of such products, supplies or materials to the replacement of such products, supplies or materials on their return to Halliburton, or at Halliburton's option, to the allowance to Customer of credit for the cost of such products, supplies or materials.
- Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.
- Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT
THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED _____

CUSTOMER

DATE _____

3-29-69

TIME _____

11:00 A.M. P.M.We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with
in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER

SEC. 10 TWP. 29N RNG. 51E COUNTY Prescott STATE Mont
CALLED OUT DATE 0300 TIME 1200 DATE 800 TIME 2000 TIME

E Popular Mont
MATERIALS USED
TYPE JOB acid 1570 reg
TREAT. FLUID Salt Water DENSITY 10 LB/GAL*API
DISP. FLUID Salt Water DENSITY LB/GAL*API
PROP. TYPE SIZE LB.
ACID TYPE 1570 reg GAL 250 % 1570
ACID TYPE GAL %
ACID TYPE GAL %
SURFACTANT TYPE GAL IN
NE AGENT TYPE 14N GAL 1 IN 250 reg
FLUID LOSS ADD. TYPE GAL LB IN
GELLING AGENT TYPE GAL LB IN
FRIC. RED. AGENT TYPE GAL LB IN
BREAKER TYPE GAL LB IN
BLOCKING AGENT TYPE GAL LB IN
PERFPAC BALLS TYPE NO.
OTHER MATERIALS 1 gal HAT 50

PERSONNEL AND EQUIPMENT
NAME EMPL. NO. UNIT NO. & TYPE LOCATION
J Herbert 5454 Glenview
J Eggen acid pump Mont
J Charles

HYDRAULIC HORSEPOWER.
AVAILABLE USED
AVERAGE RATES IN BPM
TREATING DISPL. OVERALL
PRESSURES IN PSI
BREAKDOWN 2200 MAXIMUM 3500
AVERAGE DISPLACEMENT 30 Bambi
SHUT-IN: INSTANT 5-MIN 15-MIN
FRACTURE GRADIENT

WELL DATA
FORMATION DATE COMPLETED
INIT. PROD: OIL BPD: WATER BPD: GAS MCF
PRES. PROD: OIL BPD: WATER BPD: GAS MCF
CASING: SIZE 7" WEIGHT 24" DEPTH 105629
LINER: SIZE FROM TO
OPEN HOLE: SIZE FROM TO
PERF: 418 70-4874
SHOTS/FT. TOTAL NO.

VOLUMES
LOAD & BKDN: BBL GAL PAD: BBL GAL
TREATMENT: BBL GAL DISPL: BBL GAL
TOTAL BBL GAL

CUSTOMER REPRESENTATIVE X Ted Lee
HALLIBURTON OPERATOR JW Herbert COPIES REQUESTED

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS		PRESSURE - PSI		REMARKS
				T	C	TUBING	CASING	
	1230	Prep work					400	Paper Seal + Break Tube
	500	Fill tubing + Cas				500	200	
	510	5 gal acid 250 gal	1			200	800	
	520	Set packer + pressure cas					800	
	535	5 gal Flush	3/4			2200	800	
	539	acid on formation	3/4			2000	800	
	540	Complete displacement	3/4			2000	1500	Paper Seal.
	6:30	Circulate & reverse	2			200	320	
	7:00	Pressure + Shut in				800	-200	Shut in Seal and day
	7:15	Complete job						

DATE 4-1-69	CUSTOMER ORDER NO.	WELL NO. AND FARM # 1 Huber	COUNTY Roosevelt	STATE Montana
SERVICES FROM	CODE	SALES FROM	CODE	BULK MATERIALS FROM
Glendive Mont.	55530			
DEPT.	TYPE OF WELL - DESC.	CODE	TOTAL ACID VOL. - 30 DAYS	OWNER
Cement	Oil Development	O.D.	1000	E.A. Columbus Jr
CHARGE TO	MAILING ADDRESS	CITY AND STATE	CONTRACTOR	
E.A. Columbus Jr	220 C.A. Jackson Bldg.	Denver Colorado	North West Well Service	
DUNCAN USE ONLY		CUST. INV. REQ. ORIG. &	TERMS: DUE BY THE 20TH OF FOLLOWING MONTH. INTEREST CHARGED AFTER 60 DAYS FROM DATE OF INVOICE.	
		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	\$ _____ Cash discount allowed if paid by due date. \$ _____ Tax adjustment may be deducted if discounted.	
		EXEMPT FLUID STATEMENT Must be signed ONLY if process license fee does not apply and conditions set forth below are true. Either oil produced from same formation in same field as well being treated or water or acid was used in an unaltered condition as fracturing fluid in this treatment.		
TYPE AND PURPOSE OF JOB Acid job		NO. COPIES	EXEMPT-GAL.	
			X _____ Customer or His Agent	

PRICE REF.	SECONDARY REF. OR PART NO.	DESCRIPTION	1 UNITS	2 UNITS	UNIT PRICE	AMOUNT	
R200-006		Mileage	100 Miles		.75	75	00
R201-004		Reg HCl Acid	500 Gal	15 %	36	180	00
R212-005		HAI-50 (Inhibitor)	2 Gal		7.00	14	00
R216-010		Pump Charge	2 Pump		280 ⁰⁰	280	00
R218-131		Hylfu (Surfactant)	40 Gal		8.00	320	00
R218-602		14 N (Non-Synthetic)	2 Gal		7.00	14	00
		SERVICE CHARGE ON MATERIALS RETURNED		CU. FT.			
		SERVICE CHARGE		CU. FT.			
		TOTAL WEIGHT	LOADED MILES	TON MILES			

	Pump Charge	
	Hy Flu (Surfactant)	
	14 H (Non-Simul)	216

J.C. McEntire
HALLIBURTON OPERATOR
WAS JOB SATISFACTORILY COMPLETED?
WAS OPERATION OF EQUIPMENT SATISFACTORY?
WAS PERFORMANCE OF PERSONNEL SATISFACTORY?
X Ted Nees
Customer or His Agent

TAX REFERENCE

SUB TOTAL

TAX

TAX

TAX

TOTAL

PAGE 1 OF _____

CUSTOMER

WORK ORDER CONTRACT
AND PRE-TREATMENT DATAATTACH TO
INVOICE & TICKET NO. **73639**DISTRICT **Glendive, Montana**DATE **4-1-69**

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO:

E. A. Columbus Jr.

(CUSTOMER)

AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. **1** LEASE **Huber** SEC. **10** TWP. **29 N** RANGE **S1 E**

FIELD _____ COUNTY _____ STATE _____ OWNED BY _____

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.D.I.
Heath	Sand						
FORMATION THICKNESS	FROM	TO					
ACKER: TYPE	Baker Production	SET AT					
TOTAL DEPTH	5629	MUD WEIGHT					
ORE HOLE							SHOTS/FT.
INITIAL PROD:	OIL _____ BPD, H ₂ O _____ BPD, GAS _____ MCF						
PRESENT PROD:	OIL _____ BPD, H ₂ O _____ BPD, GAS _____ MCF						
CASING	Used	23"	7"	0	5629		
LINER							
TUBING	Used	6.5"	2 7/8"	0			
OPEN HOLE							
PERFORATIONS							
PERFORATIONS			5 1/2"	4870	4874		8
PERFORATIONS							

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED _____

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

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- Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
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- Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or services.
- At Customer's expense, to recover any Halliburton equipment, tools or instruments which are lost or damaged in the well, and if recovery cannot be had, to pay Halliburton for such equipment, tools or instruments unless such loss or damage is caused by the negligence of Halliburton.
- Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. There are no warranties, express or implied, of merchantability, fitness or otherwise which extend beyond those stated in the immediately preceding sentence. Halliburton limits its liability for breach of any warranty or for damages resulting from its negligence with respect to the use of such products, supplies or materials to the replacement of such products, supplies or materials on their return to Halliburton, or at Halliburton's option, to the allowance to Customer of credit for the cost of such products, supplies or materials.
- Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.
- Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED _____

CUSTOMER

DATE **4-1-69**TIME **9:00** A.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER

STIMULATION SERVICE
TREATING REPORTHALLIBURTON DISTRICT
HALLIBURTON DIVISIONBlendline
DenverSTAGE NO. 2
PAGE NO. 1

CUSTOMER

C. A. Columbus Jr.

LEASE

Shuler

WELL NO.

DATE

4-1-69

FIELD East Poplar (South End)		SEC. 10	TWP. 29N	RNG. 51E	COUNTY Reservoir	STATE Montana		
MATERIALS USED		CALLED OUT 4:29 DATE 4:30		ON LOCATION 7:30 TIME		JOB STARTED 10:00 DATE TIME	JOB COMPLETED DATE TIME	
TYPE JOB Acid - Oil squeeze		PERSONNEL AND EQUIPMENT						
TREAT. FLUID Medium crude		NAME M. C. Moline		EMPL. NO. 11308		UNIT NO. & TYPE 1-10 acid		LOCATION Blendline
DISP. FLUID Medium crude		NAME Stubb		EMPL. NO. 3695		UNIT NO. & TYPE 5454		LOCATION Mont.
PROP. TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
PROP. TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
ACID TYPE HCl		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
ACID TYPE HCl		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
ACID TYPE HCl		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
SURFACTANT TYPE Hallo-H		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
NE AGENT TYPE 14N		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
FLUID LOSS ADD. TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
GELLING AGENT TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
FRIC. RED. AGENT TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
BREAKER TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
BLOCKING AGENT TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
PERFPAC BALLS TYPE —		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
OTHER MATERIALS 2 gal HAI-50		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
HYDRAULIC HORSEPOWER		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
AVAILABLE 250		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
USED 156		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
AVERAGE RATES IN BPM		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
TREATING 2 1/2		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
DISPL. 2 1/2		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
OVERALL 2 1/2		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
PRESSURES IN PSI		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
BREAKDOWN 2250 - 1950		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
MAXIMUM 2550		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
AVERAGE 2550		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
DISPLACEMENT 2550		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
SHUT-IN: INSTANT 2300		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
5-MIN. 2100		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
15-MIN. 1850		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
FRACTURE GRADIENT Packer 0		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
VOLUMES		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
LOAD & BKDN: BBL GAL 500		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
TREATMENT: BBL GAL 2100		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
DISPL: BBL GAL 28.5		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline
TOTAL BBL 211		NAME M. Green		EMPL. NO. 21614		UNIT NO. & TYPE West. Cng.		LOCATION Blendline

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS		PRESSURE - PSI		REMARKS
				T	C	TUBING	CASING	
	10:06	Pump 500 gal acid	2 1/2	1		0	300	500 gal
	10:10	200 tubing w/ treated crude shut down to lighter head	2 1/2	1		0	300	13 bbls
	10:24	Pressure cng	—		1		500	
	10:26	Pump acid away	4	1		2150	1200	
	10:37	Acid on	4	1		2000	1250	28.5 bbls total
	42	100 gal acid away	1			1950	1300	31 bbls total
	46	250 gal acid away	1 1/2	1		2150		
	50	500 gal acid away	1 1/2			2200	1200	34.5 " "
	58	fractured crude at 500 gal crude in	2 1/2	1		2500	1000	32.5 bbls total
	11:07	1500 gal treated crude in	2 1/2	1		2550	500	26.5 " "
	26	3500 " " " " " "	2 1/2	1		2550	—	124.5 " "
	44:40	5000 " " " " " "	2 1/2	1		2550	—	160.5 " "
	50	6000 " " " " " "	2 1/2	1		2550	—	184.5 " "
	59	7000 " " " " " "	2 1/2	1		2550	—	208.5 " "
	12:00	7100 " " " " " "	2 1/2	1		2550	—	211.0 " "

CUSTOMER

HALLIBURTON SERVICES
STIMULATION SERVICE
TREATING REPORT

HALLIBURTON DISTRICT Blendine
HALLIBURTON DIVISION Denver

ATTACH TO TICKET NO. 25100
STAGE NO. one
PAGE NO. -

FIELD <u>East Poplar</u>	SEC. <u>10</u>	TWP. <u>29N</u>	RNG. <u>51E</u>	COUNTY <u>Richland</u>	STATE <u>Mont.</u>
MATERIALS USED		DATE <u>2:00</u>	ON LOCATION <u>2:00</u>	JOB STARTED <u>9:45</u>	JOB COMPLETED <u>11:30</u>
TYPE JOB <u>Waterflood (Hulen lease)</u>		TIME	TIME	TIME	TIME

TREAT. FLUID water DENSITY _____ LB/GAL. API
DISP. FLUID water DENSITY _____ LB/GAL. API
PROP. TYPE sand SIZE 20-40 LB. 2500
PROP. TYPE _____ SIZE 10-20 LB. 2000
ACID TYPE _____ GAL. _____ %
ACID TYPE _____ GAL. _____ %
ACID TYPE _____ GAL. _____ %
SURFACTANT TYPE _____ GAL. _____ IN
NE AGENT TYPE 14N GAL. 40 IN 500 bbls
FLUID LOSS ADD. TYPE WAC-11 GAL. 300 IN 15000 gal
GELLING AGENT TYPE WG-6 GAL. 300 IN 15000
FRIC. RED. AGENT TYPE _____ GAL. _____ LB. _____ IN
BREAKER TYPE _____ GAL. _____ LB. _____ IN
BLOCKING AGENT TYPE _____ GAL. _____ LB. _____ IN
PERFPAC BALLS TYPE _____ NO. _____

OTHER MATERIALS none
HYDRAULIC HORSEPOWER
AVAILABLE 1050 USED 1042
AVERAGE RATES IN BPM
TREATING 12 1/2 DISPL. 12 1/2 OVERALL 12 1/2
PRESSURES IN PSI
BREAKDOWN 4300-3800 MAXIMUM 4300
AVERAGE 3400 DISPLACEMENT 3200-3350
SHUT-IN: INSTANT 2050 5-MIN. 1800 10-MIN. 1200
FRACTURE GRADIENT _____

VOLUMES
LOAD & BKDN: BBL. GAL. _____ PAD: BBL. GAL. 3000
TREATMENT: BBL. GAL. 12,000 DISPL: BBL. GAL. 35
TOTAL BBL. GAL. 395

PERSONNEL AND EQUIPMENT			
NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
Crites	9926	58-C	
Breighy	29469	237	Blendine
Loebel	30405	61-U-2	
Amundson	30557	2879	
Mosley	15101	M-45	
		6393	
Benson	33827	land	
		5025	
Charles	31436	metho	
Johnson		5159	
		0-1 cap	
McLean	21814		
Walker	9551	7ubbl	

WELL DATA
FORMATION Heath DATE COMPLETED 5-3-69
INIT. PROD: OIL _____ BPD: WATER _____ BPD: GAS _____ MCF
PRES. PROD: OIL 27 BPD: WATER 5 BPD: GAS _____ MCF
CASING: SIZE 2 WEIGHT 23-26 DEPTH 5629
LINER: SIZE _____ FROM _____ TO _____
OPEN HOLE: SIZE _____ FROM _____ TO _____
PERF: 4864-4882
SHOTS/FT. 1 TOTAL NO. 20

CUSTOMER REPRESENTATIVE X Ted Nies
HALLIBURTON OPERATOR Crites - McLean (Cgs) COPIES REQUESTED 3

CHART NO.		TIME		OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS		PRESSURE - PSI		REMARKS
						T	C	TUBING	CASING	
		9:45		Test RRP C 4917	—		1		4500	
		10:45		Test lines - Pressure cap	10	4	0	4500	1000	
		56		Breakdown for	10			4300		3000 gal
		11:02		Start sand C 1/2 ppg 20-40	12 1/2			3800	300	3000 gal
		05 1/2		Load sand for	12 1/2			3500		
		08		Increase 20-40 to 3/4 ppg	12 1/2			3450	0	4000 gal
		10 1/2		On f	13			3200		
		16 1/2		Increase 20-40 to 1 ppg	13			3200		3000 gal
		17		On f	13			3250		
		23		Start 10-20 C 1 ppg	12 1/2			3100		2000 gal
		25 1/2		On f	12 1/2			3150		
		28		Start flush	12 1/2			3200		
		11:31		Job Complete	13			3350		
				14 N C 2 gal / 1000 gal in mixer - medium for water						
				WG-6 & WAC-11 C 20# / 1000 gal						
				Packer C 4816 on 2 3/8" CUC Tubing						

CUSTOMER C. H. Tolson
LEASE
WELL NO. 1
DATE 5-3-69

CEMENTING AND TOOLS

JOB REPORT

FORM 1909

HALLIBURTON DISTRICT

HALLIBURTON DIVISION

STAGE NOS.

PAGE NO.

FIELD

East Poplar

TYPE JOB

SEC.

TWP.

RNG.

COUNTY

STATE

10

29N

31E

Richland

Mont.

CALLED OUT
DATE
TIMEON LOCATION
DATE
TIMEJOB STARTED
DATE
TIMEJOB COMPLETED
DATE
TIME

CEMENTING

TESTING & TOOLS

SURFACE _____ OPEN HOLE _____
 INTERMEDIATE _____ THRU PERF. _____
 PRODUCTION _____ CASING LEAK _____
 SQUEEZE _____ SERVICE JOB TEST _____
 PUMPING _____ OTHER TEST _____
 PLUG BACK _____ SET TOOL (TYPE) *RHS 4816*
 GROUTING _____ SET BRIDGE PLUG *TP 4918*
 OTHER _____ OTHER TOOL JOB _____

TOOLS AND PRODUCTS

TYPE AND NUMBERS	MAKE
FLOAT COLLAR	
GUIDE SHOE	
FLOAT SHOE	
CENTRALIZERS	
BOTTOM PLUG	
TOP PLUG	
HEAD	
PACKERS	
ROD	
ST	
OTHER	

PERSONNEL AND EQUIPMENT

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
DC Walker	9552	7"23-29 RHS 7"23# TP RBP	Glendive

CUSTOMER REPRESENTATIVE X

Ted Nees

HALLIBURTON OPERATOR

DC Walker

NUMBER OF COPIES REQUESTED

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU. FT./SK.	MIXED LBS./GAL.

JOB RECORD

START TIME	ELAPSED TIME	RATE BBL./MIN.	VOLUME	PRESSURE IN PSI		JOB DETAILS
				TUBING	CASING	
45			92	4500		test RBP. Held O.K.
45				4500	1000	test surface equip. & Lines.
56	10	3000	4300			Break down
02	12 1/2	3000	5800	300		send e 1/2 ppq 20-40
05	12 1/2		3500			
08	12 1/2	4000	3450	0		3/4 ppq 20-40
10	13		3200			send on formation
16	17	3000	3200			1" ppq 20-40
9	13		3250			
3	12 1/2	2000	3150			start 10-20
5	12 1/2		3150			
5 1/2	12 1/2		3150			send on formation
8	12 1/2		3200			start flush
1:31	13		3320			job complete.

CUSTOMER

E.A. Polkman

LEASE

Huber

WELL NO.

1

DATE

5/3/69

HALLIBURTON SERVICES
STIMULATION SERVICE
TREATING REPORT
FORM 1921

HALLIBURTON DISTRICT
HALLIBURTON DIVISION

Gillette
Denver

ATTACH TO TICKET NO. 18311
STAGE NO. 1
PAGE NO. 1

CUSTOMER Polumbus Corp.

FIELD	SEC.	TWP.	RNG.	COUNTY	STATE
				Rossevelt	Mont.
TYPE JOB	MY-T-Frac	DATE	1930	TIME	1216
TREAT. FLUID	Gel Water	DENSITY	LB/GAL.*API		
DISP. FLUID	Water	DENSITY	LB/GAL.*API		
PROP. TYPE	Sand	SIZE	10/20	LB.	
PROP. TYPE	Sand	SIZE	8/12	LB.	
ACID TYPE		GAL.	%		
ACID TYPE		GAL.	%		
ACID TYPE		GAL.	%		
SURFACTANT TYPE	MYF-3	GAL.	80	IN.	
NE AGENT TYPE	14-N	GAL.	55	IN.	
FLUID LOSS ADD. TYPE	Wac-9	EXT. LB.	300	IN.	
GELLING AGENT TYPE	MYF-1	EXT. LB.	1600	IN.	
PRIC. RED. AGENT TYPE	MYF-2	EXT. LB.	600	IN.	
BREAKER TYPE	GBW-2	EXT. LB.	5	IN.	
BLOCKING AGENT TYPE	MYF-4	EXT. LB.	180		
PERFAC BALS TYPE	KCL	NO.	2000	#	
OTHER MATERIALS	Wac - 10		200	#	

PERSONNEL AND EQUIPMENT

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
Johnson			Gillette
Lambert		8539 HT	"
Crowley		8519 M50	"
Owens		6786 Iron	"
Juneau		8489 Sand	"
Mc Entire			Glendive
Johnson		8194 T10	"
Bronson		7921 Mat.	"
Munoz		Eng. Tranic	"
Mc Clean		Eng.	Glendive
Lasater		Eng.	Worland

WELL DATA

FORMATION Heath DATE COMPLETED _____

INIT. PROD: OIL _____ BPD: WATER _____ BPD: GAS _____ MCF

PRES. PROD: OIL _____ BPD: WATER _____ BPD: GAS _____ MCF

CASING: SIZE 7 WEIGHT 23-26 DEPTH 5953

LINER: SIZE _____ FROM _____ TO _____

OPEN HOLE: SIZE _____ FROM _____ TO _____

PERF: 1864 -82

SHOTS/FT. _____ TOTAL NO. 20

CUSTOMER REPRESENTATIVE X Ted Nees

HALLIBURTON OPERATOR Johnson COPIES REQUESTED 2

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS		PRESSURE - PSI		REMARKS
				T	C	TUBING	CASING	
	11:16	Water Pad 4000 Gal. w/50 #1000						
		Wac -10	9	2	1	3900	700	
	11:28	MYF Pad 4000 Gal. w/25 #1000 Wac-9						
		& 20#/1000 MYF -4	9	2	1	3900	700	
	11:38	1 # Gal. 10/20 Sand with						
		25 #/1000 Wac-9 & 20#/111 MYF-4	9	2	1	3900	700	0
	11:45	1 #/Gal. 8/12 Sand With						
		25#/1000 Wac-9 & 20#/1000 MYF-4	9	2	1	3900	700	2500
	11:53	3 #/Gal. 8/12 Sand w/25#/1000 Wac-9	9	2	1	3900	700	5000
	12:00	4 #/Gal. 8/12 Sand	9	2	1	3900	700	7500
	12:06	Start Flush	9	2	1	3600	700	11000
	12:16	End Of Job	6	1	1	3600	700	2800

LEASE

Huber

WELL NO. 1

DATE 11-23-69

WORK ORDER CONTRACT
AND PRE-TREATMENT DATAATTACH TO
INVOICE & TICKET, NO. 213131DISTRICT Cleveland, MontDATE 9-26-71

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: Columbus corp (CUSTOMER)
AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICINGWELL NO. 1 LEASE Huber SEC. _____ TWP. _____ RANGE _____FIELD Poplar COUNTY Beavert STATE Mont OWNED BY Columbus corp

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

PACKER: TYPE RBP SET AT 4917

TOTAL DEPTH _____ MUD WEIGHT _____

BORE HOLE _____

INITIAL PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF

PRESENT PROD: OIL _____ BPD, H₂O _____ BPD, GAS _____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	<u>4</u>		<u>7"</u>	<u>KB</u>		
LINER						
TUBING	<u>4</u>	<u>6.4</u>	<u>2 7/8"</u>	<u>0</u>	<u>4917</u>	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED _____Release RBP Cyl Type

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- (a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- (b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- (c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- (d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- (e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- (f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or services.
- (g) At Customer's expense, to recover any Halliburton equipment, tools or instruments which are lost or damaged in the well, and if recovery cannot be had, to pay Halliburton for such equipment, tools or instruments unless such loss or damage is caused by the negligence of Halliburton.
- (h) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. There are no warranties, express or implied, of merchantability, fitness or otherwise which extend beyond those stated in the immediately preceding sentence. Halliburton limits its liability for breach of any warranty or for damages resulting from its negligence with respect to the use of such products, supplies or materials to the replacement of such products, supplies or materials on their return to Halliburton, or at Halliburton's option, to the allowance to Customer of credit for the cost of such products, supplies or materials.
- (i) Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.
- (j) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT
THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED _____

CUSTOMER

DATE 9-26-71TIME 10

A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER





PAGE 1 OF
PAGES

NO. 213121

WELL NO. AND FARM 2 Huber		COUNTY Pawnee	STATE Mont	DATE 9-26-71
OWNER Columbus corp		CONTRACTOR R.A. Prother		DUNCAN USE ONLY
CHARGE TO Columbus corp		DELIVERED TO		LOCATION Glenview
ADDRESS Denver, Colo		SHIPPED VIA		LOCATION 2
DUNCAN USE ONLY d-97		CUST. INV. REQ. ORIG. & <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	REQUISITION	LOCATION 3
			ORDER NO.	BULK MATERIAL DELIVERY TICKET NO. B-
			TOTAL ACID - 30 DAYS	WELL TYPE
			NO. COPIES	
TYPE AND PURPOSE OF JOB Reloc RBP		TERMS: DUE BY THE 20TH OF FOLLOWING MONTH, INTEREST CHARGED AFTER 60 DAYS FROM DATE OF INVOICE \$ _____ Cash discount allowed if paid by due date. \$ _____ Tax adjustment may be deducted if discounted.		

[illegible]

THIS IS NOT AN INVOICE

			<u>TAX REFERENCES</u>		<u>SUB TOTAL</u>				
WAS JOB SATISFACTORILY COMPLETED? _____			_____	_____	_____	TAX			
WAS OPERATION OF EQUIPMENT SATISFACTORY? _____			_____	_____	_____	TAX			
WAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____			_____	_____	_____	TAX			
X	 _____ Customer or His Agent		 _____ Halliburton Operator			TOTAL			

CUSTOMER

Nº 7042

Invoice No. _____
 Invoice Date _____
 Customer's Order No. _____
 Date Shipped 3-4-69.
 District 1211.
 Operating Base 1211

consideration of the furnishing of your Log & Plot service
agrees as follows: to-wit:
referred to as the customer, agrees to pay you the amount of your published prices for said services at your _____ office.
and within the term fixed by the invoice, interest of six percent, from the date of invoice, will be charged and if placed with
signed, agrees to pay attorney fees of twenty percent of the invoice amount or the minimum of \$75.00.
The owner of the work to be done and that said well is in proper and suitable condition for the
of all depth measurements shall be made under his supervision.
ing in the performance of the work ordered, the customer agrees that you do not guarantee the results of your services,
liable for injury to persons or property arising in the performance of said service.
pursue you for the reasonable value of any of your instruments, tools or equipment lost or damaged in the rendition of your
going constitutes the entire agreement and that your employees have no authority to alter terms hereof.

To Be Paid By J. J. Jones By _____
 (print correct name) (signature of customer or authorized representative)

TOOL	TYPE	SIZE		RUNS	LOADS	SHOTS	HOLES	MISSES			
		Gun	Bullet					D	G	L	C
1) P. 7.7. PERF.		#1	"	1	5	5	5				
2) 1/2		1 3/4		1							
3) 1/2				1							

I certify that the above ordered services and/or products have been received

[Signature]

(customer or authorized representative)

Operator WesleyWIRELINE, INC.
RADIOACTIVITY LOGGING
PERFORATING

Contract

Nº 7048

Rigman B-116Charge to
Invoice
Address

City

Ship to
(or well no.)Address
(or field)

VIA

County

State

Invoice No.

Invoice

Date

Customer's

Order No.

Date

Shipped

District

Operating

Base

Legal
Description

TO WIRELINE, INC. In consideration of the furnishing of your

herein set forth, the undersigned agrees as follows: to-wit:

The undersigned, hereinafter referred to as the customer, agrees to pay you the amount of your published prices for said services at your office. Should the amount due be not paid within the term fixed by the invoice, interest at six percent, from the date of invoice, will be charged and if placed with attorney for collection, the undersigned agrees to pay attorney's fees of twenty per cent of the invoice amount or the minimum of \$75.00.

The customer certifies that he is the owner of the well on which the work is to be done and that said well is in proper and suitable condition for the performance of said work and that all depth measurements shall be made under his supervision.

Because of the hazards existing in the performance of the work ordered, the customer agrees that you do not guarantee the results of your services, and that you are not to be held liable for injury to persons or property arising in the performance of said service.

The customer agrees to reimburse you for the reasonable value of any of your instruments, tools or equipment lost or damaged in the rendition of your service.

Customer agrees that the foregoing constitutes the entire agreement and that your employees have no authority to alter terms hereof.

To Be Paid By

(print correct name)

By

(signature of customer or authorized representative)

DESCRIPTION

PRICE

AMOUNT

TOTAL

A/C

COST

run

log

as directed by Mr.

Service Charge

Depth Charge from Surface to

feet

Logging Charge

feet

Service Charge

for Port.

Type 4" D.D. TPT perforate 20holes through casing at 1 & 2 holes per foot at the following depths asdirected by Mr. Neas20 Holes from 4882 to 4864150.00240.00\$390.00

REMARKS

THRU TUBING

CASING

OPEN HOLE

D.W.2"

TOOL

TYPE

SIZE

Gun Bullet

RUNS

LOADS

SHOTS

HOLES

MISSES

D G L C

PERF.

TPT41202020

I certify that the above ordered services and/or products have been received

(customer or authorized representative)

PRODUCTION &
INJECTION DATA



9

Attachment No. 1

Prepared By	Initials	Date
Approved By		

WELL EQUIPMENT INVENTORY

Equipment	Make	Type, Size and/or Description	Number or Feet	Value
Pumping Unit	Lufkin	2 1/2" - 350 TC-3-127-363 Serial # 1778		C
Electric Motor or Engine	Valley	80 HP 3 Phase 460V SNHS 445V Frame Serial # 879418		C
Electrical Control (a)	GE	50 HP 1/2 Time Clock Re-starter		C
Tubing Head	Cameron	Series 800		C
Casing Head	Cameron	Series 800		C
Tubing		2-7/8" EUE 3rd	5607'	D
Rods	USI 2-87	88 - 7/8", 122 - 3/4"	5525'	D
Casing		7" 22/24 2-85	5983'	NA
Flow Line (b)		2" Fiberglass 2 1/8" Tubing	1500'	D
Treater	National	6 x 20' Vertical		C
Heater				
Separator				
Tank (c)	350 gal 350 gal	Galvanized, Bolted, Cone Btm.	2	C
Chemical Pumps:	2 (Vegas)	Ser. #20423 Ser. #20427 XXXXXXXXXXXX		B
Motors for Chemical Pumps	2-Daytons	Model 6K734L RPM 1725 HP-1/2		B
Sucker Rod Pump	Avelson	2 1/2" x 2" insert		B
Meters (d)				
Electrical System (e)	EMA			

Buildings and Miscellaneous:

10 x 22 Wood Frame Treater House, Insulated and Metal Covered	Gr. C
1 - Worthington 304V Circulating Pump Serial # 88284 with 3 HP Marathon Electric Motor	Baker Ind.
3 phase, 460V type TOS-3E, Frame 125T Motor Serial # 738528. 1177	Gr. C
Total Equip. Value	14,000
Sub. Cost To Well	15,000

- NOTES: (a) Including protective devices, time clock, etc.
 (b) Including length, size and type.
 (c) Including size, thickness, cone or flat bottomed, plain or galvanized.
 (d) Gas or oil.
 (e) If company owned, include transformers and equipment for electrical distribution system.

Lease & Well No.: Huber #1 E State: Montana
 Field: at Poplar Tank Battery County: Beauregard

